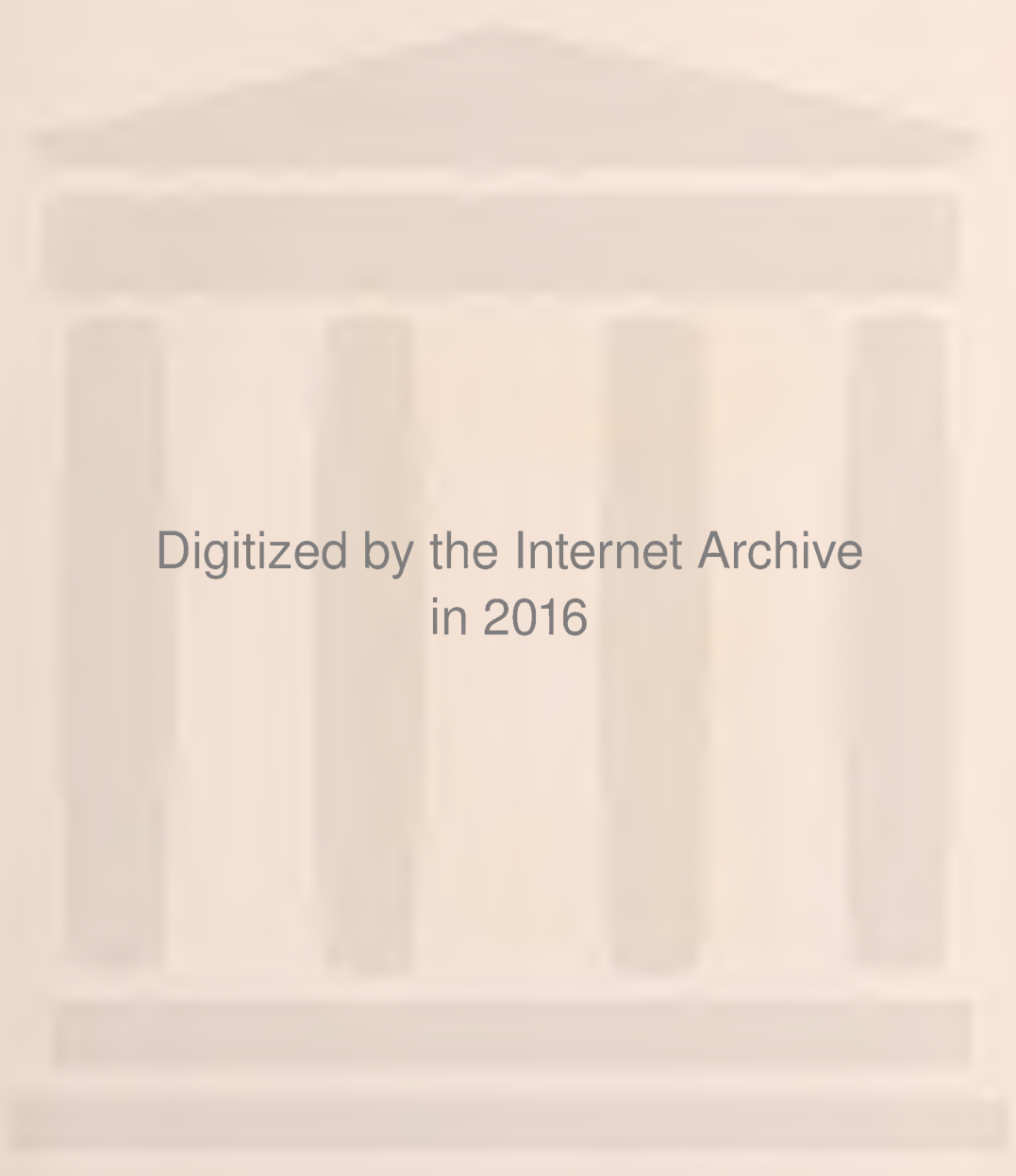


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January 1979
BALCONY

Journal of the
State Medical
Association

Mississippi

[Publication No. 284800]

Contents:

Cervical Pregnancy:
Report of a Case

Low Back School: A
Conservative Method
for the Treatment of
Low Back Pain



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Indications: Tension and anxiety states, somatic complaints which are concomitants of emotional factors, psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation, symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal, adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; ataxiosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication. Abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or over-sedation.

Side Effects: Drowsiness, confusion, diplopia,

hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.

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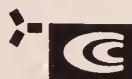
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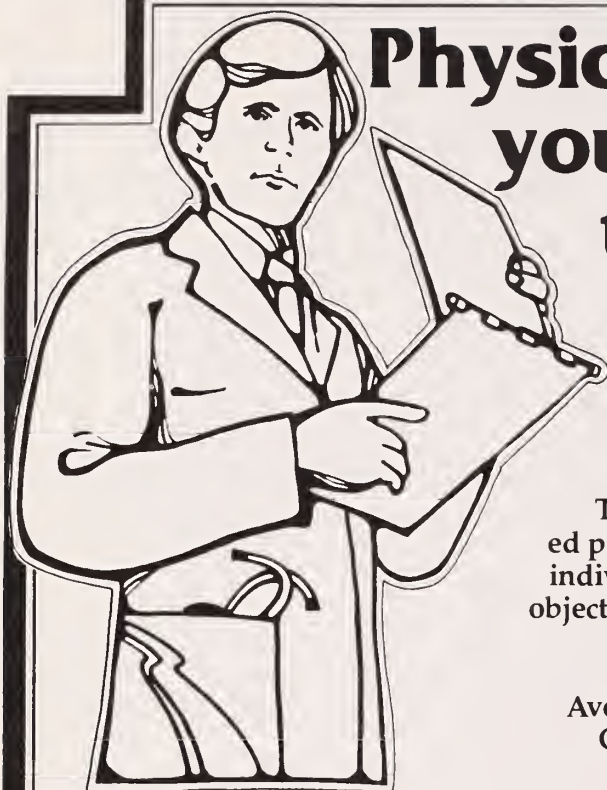
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Volume XX

Number 1

January 1979



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70-37

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UMC Schedules Practice Management Course

A husband and wife team from La Jolla, CA, will present a two-day program on private practice management for physicians and their assistants at the University of Mississippi Medical Center, Feb. 3-4.

Conducted by Arthur Fred and Brenda Bern, the program will focus on personnel problem solving, time management, office design, financial records and controls, and group practice versus solo practice. The afternoon session Feb. 4 will be devoted to personal financial management for physicians, investment information, billing and bookkeeping systems and collection techniques that get results.

Bern is the founder and president of Practice Management Consultants, Inc., and has worked in the field of private practice management since 1963. Mrs. Bern, vice-president of the company, has coordinated programs on training and supervision of professional office personnel.

The seminar is sponsored by the University of Mississippi Medical Center Division of Continuing Health Professional Education. Course fee is \$100.00 for each physician, spouse or assistant attending alone. Fee for each spouse or assistant attending with a physician is \$25.00.

The course carries 12 hours credit in Category 1, AMA and AAFP. Advance registration is required. For more information, contact Continuing Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

Medical Society Charged in Anti-Trust Suit

The Justice Department has charged that a Florida hospital and county medical society conspired to stifle competition from an HMO.

The anti-trust suit alleges that the Volusia County (Florida) Medical Society and Halifax Hospital denied hospital staff positions to physicians who contracted with the Florida Health Care Plan, a local Health Maintenance Organization.

The FTC states that the "combination and conspiracy" began in 1971 and that the "medical society opposition (to the HMO) has made it almost impossible for the HMO to recruit fulltime staff physicians from the local pool of doctors." The necessity of hiring out-of-town physicians has interfered with marketing, the FTC states, because some potential subscribers have been reluctant to join an HMO whose staff doctors were unknown locally.

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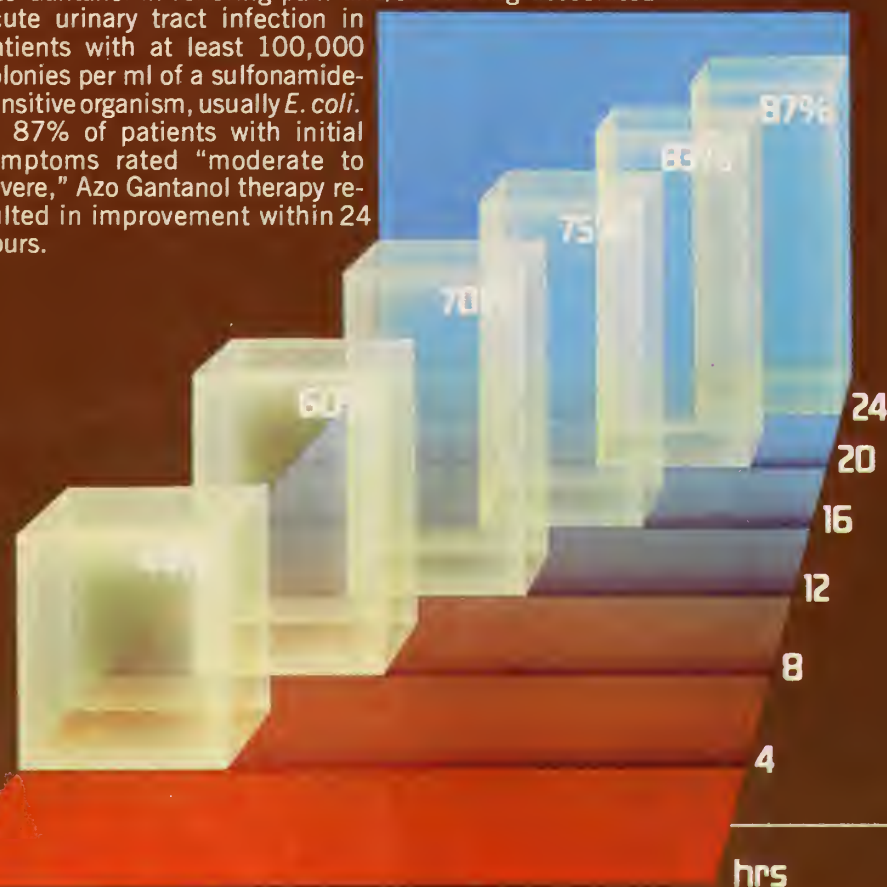
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Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for
the pain

for
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

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AMA Will Challenge FTC Ruling

The AMA has announced that it will challenge and immediately appeal a ruling of a Federal Trade Commission Administrative Law Judge that charges the association with restraining physician advertising and restraining physician participation in certain health delivery systems.

"The most shocking and pervasive attack on professionalism found in Judge Ernest G. Barnes' ruling is, 'Respondents (AMA) will be permitted to participate in setting ethical guidelines for the conduct of their members, after first obtaining the permission and approval of the FTC'"; said Dr. Robert B. Hunter, chairman of the AMA Board of Trustees.

"We don't feel that lawyers, dentists, engineers, and other professionals, labor unions, business entities, charitable organizations, state and local government entities should have to ask the federal government if they can issue ethical guidelines to their members and what those guidelines should say.

"It has been clear throughout the entire proceeding that the AMA is clearly in favor of physician advertising and a free flow of public information about health care services," Hunter continued. "We are opposed to false, and misleading advertising and its adverse impact on the quality of health care available to patients."

Testimony presented during FTC hearings on the advertising issue has shown that misleading advertising has led patients to inadequate and harmful treatment.

"The current abortion issue in Chicago acts as an excellent example of misleading advertising that the association opposes."

Judge Barnes' ruling came in a case brought to the commission three years ago against the AMA, the Connecticut State Medical Society and the New Haven County (Conn.) Medical Association. The FTC contended that the three organizations agreed to prevent or hinder physicians from advertising and engaging in competitive practices.

ACCP Plans Respiratory and Cardiac Failure Course

Captiva Island, FL, will be the location for the American College of Chest Physicians' postgraduate course, "Management of Respiratory and Cardiac Failure." This continuing medical education program will be held at the South Seas Plantation, Feb. 5-9, 1979.

This postgraduate course has been approved for 22½ credit hours in Category 1 of the Physician's Recognition Award of the AMA.

Presentations during this five-day course will primarily emphasize the management of respiratory and cardiac failure. The sessions will stress pulmonary and cardiac function in health and disease, as well as the assessment of the patient with respiratory and cardiac insufficiency. Discussions of the pathophysiologic disturbances present in COPD, asthma, ARDS, and pulmonary hypertension will be presented. A session on the "Failing Heart" will include presentations on new cardiac drugs, sudden death, and the role of vasodilators. A panel discussion on the interaction of pulmonary and cardiac failure will follow this session.

A significant feature of this course will be the "Chest Conferences" designed to encourage the free exchange of information on the problems related to the recognition and management of acute and chronic respiratory and heart failure. All participants will be asked to bring their own case and x-ray film for the chest conferences. The program will also include formal lectures, panel discussions and question and answer periods after each presentation.

For further information, please write to: Dale E. Braddy, Director of Education, American College of Chest Physicians, 911 Busse Highway, Park Ridge, IL 60068.

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NEWSLETTER

January 1979

Dear Doctor:

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AMPAC uses a pragmatic approach to campaign evaluation.

The professionalism of the candidate's campaign, degree of support from the local medical community, whether or not the candidate has a "government approach" or "private sector" approach to problem-solving are factors.

Voters in North Dakota defeated a proposal that would have put health care costs under state control. The plan, which originated with the state insurance commissioner, would have made the state health officer responsible for holding hearings to set maximum rates for all health services. The voters rejected the measure by a margin of more than three to one.

An AMA survey of state medical disciplinary boards has found that disciplinary actions against physicians increased six-fold between 1971 and 1977. In 1971 there were 119 actions brought against physicians. In 1977 there were 685. Much of the increase can be attributed to rising number of states providing immunity from civil liability for persons making reports to state disciplinary board.

Last year 733 doctors left Canada to escape the red tape, job frustrations and relatively low pay of Canada's Medicare plan, according to the AMA Public Affairs Division. In the first three months of 1978, 145 more left and according to immigration applications, total 1978 exodus could reach 1,500. That's only slightly below the total graduated annually from Canadian universities.

Hospital costs and health care will be top items on the 96th Congress' agenda when it convenes Jan 15, House Speaker T. O'Neill told a press conference. Senate Majority Leader R. Byrd predicts "national health insurance will move to center stage". Meanwhile, the Speaker has assigned staff to study House rules to officially set aside time for oversight rather than legislative function.

Sincerely,



Nola Gibson
Managing Editor

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*** Warning**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions, nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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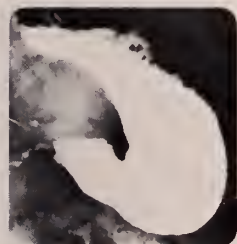
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*This drug has been classified "probably" effective in treating certain functional G.I. disorders.

[†]See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective

May also be useful in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, acute enterocolitis, and functional gastrointestinal disorders); and in neurogenic bowel disturbances (including the splenic flexure syndrome and neurogenic colon)

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy), obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with autonomic neuropathy; hepatic or renal disease, ulcerative colitis—Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon, hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension, hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention; blurred vision and tachycardia; palpitations, mydriasis, cycloplegia, increased ocular tension, loss of taste, headache, nervousness, drowsiness, weakness, dizziness, insomnia, nausea, vomiting, impotence, suppression of lactation, constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations, some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg capsule and syrup: Adults 1 or 2 capsules or teaspoonfuls syrup three or four times daily. Children: 1 capsule or teaspoonful syrup three or four times daily. Infants: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg: Adults 1 tablet three or four times daily. Bentyl Injection: Adults 2 ml (20 mg) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanechol chloride USP) should be used.

Product information as of October, 1976

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Centers Are Chosen for Laetrile Tests

Four cancer research centers have been tentatively named by the National Cancer Institute to conduct the first government-sanctioned human tests on laetrile.

Cancer researchers at the University of Arizona Health Sciences Center, the University of California at Los Angeles Medical School, the Mayo Clinic in Rochester, Minn., and Sloan-Kettering Memorial Institute in New York City have all been involved in planning protocol on how best to conduct the studies. The institutions are expected to apply to the Food and Drug Administration for an investigational new drug (IND) application.

HMO Program Receives Funding

The Health Maintenance Organization (HMO) program, one of the few major health bills of the last congressional session to secure enactment, has been signed into law by President Carter.

The measure, a prime goal of the Administration, provides a three-year extension, with certain amendments to the HMO proposals.

The bill authorizes \$31 million, \$65 million, and \$68 million for the next three fiscal years.

The maximum amount of an initial development grant that can be made was increased from \$1 million to \$2 million beginning in fiscal year 1980.

The government can make loans and loan guarantees for the acquisition or construction of ambulatory health care facilities and for the acquisition of equipment. Loan guarantees to private HMOs can only be for projects that will serve medically underserved populations. The loans made or guaranteed for an ambulatory health care facility cannot be more than \$2.5 million.

An ambulatory health care facility was defined to mean a health care facility for the provision of diagnostic, treatment, and prevention services to ambulatory patients.

The bill provides that beginning four years after an HMO becomes qualified it may not enter into contracts with physicians other than members of the HMO staff, medical groups, or individual practice associations if the amount paid under these contracts for basic and supplemental health services provided by physicians exceeds 15 per cent of the total estimated amount to be paid by the HMO to physicians for the provisions of basic and supplemental physician services. The percentage is increased to 30 per cent if the HMO principally serves a rural area.

DATELINE

Medicaid, Medicare Costs Increase

Richmond, VA - Richmond News Leader reports "Medicaid and Medicare costs increased twice as fast as general medical costs; last year, government paid \$40 billion for both programs. Federal responsibility for this began with over construction of hospital beds under generous Hill-Burton funding program. Medicaid and Medicare were instituted in 1966 with initial outlay of \$5 billion. Promise of free and subsidized care placed unprecedented burden on existing services".

The Public Spends Much Time on Forms

Washington, DC. - The Office of Management and Budget (OMB) reported to President Carter that the public is spending about 10% less time filling out federal forms than in January of 1977. OMB asserts the government is making "real progress in its war against federal paperwork, which each year costs the public and business 784 billion hours at a price of \$100 billion." Under current review are more than 1,300 reports various federal agencies are required to send to Congress.

Coffee Doesn't Harm the Heart

Durham, NC - Coffee drinking gets a clean bill of health in a Georgia research study reported by Duke University Medical Center in Archives of Internal Medicine. Total deaths showed no association with coffee usage in Evans County, Ga. Deaths from coronary heart disease showed no statistically significant difference between high and low coffee consumers. Neither coronary heart disease nor stroke death rates seem related to coffee-drinking habits.

AMA Urges Alcohol Labeling

Chicago, IL - In a recent policy move, the AMA House of Delegates adopted a resolution concerning the possible health hazards of alcohol consumption and the potential danger of alcohol consumption during pregnancy. Toward this end, AMA recommended that labels on all containers of alcoholic beverages should feature the following statement: "Alcohol may be injurious to your health and, if consumed during pregnancy, to the health of unborn children". MSMA previously adopted similar position.

AMA's Uniform Insurance Form

Chicago, IL - The Uniform Health Insurance claim form is becoming the predominant claim form throughout the health insurance industry. Introduced in 1974, the form was designed for use in both the private health insurance industry and in government programs. Health Insurance Assn. of America says each of its approximately 300 member companies will accept the form when submitted by a physician's office. Blue Shield Assn. says 24% of their 70 member plans adopted it.

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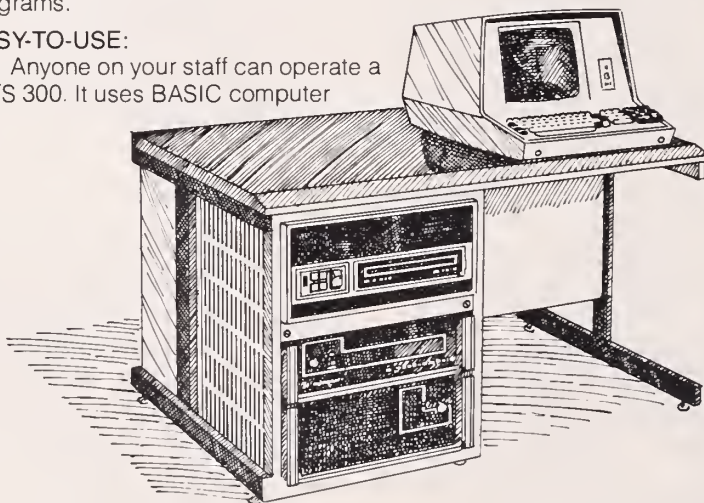
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Mississippi Perinatal Association Is Formed

The Mississippi Perinatal Association has been organized by a committee made up of obstetricians and pediatricians selected by the respective state societies. The overall purpose of the society is the advancement of maternal and infant care in the state of Mississippi.

The association is intended to be an active association promoting participation in the advancement of health care as well as legislative action.

Officers include: president, Dr. Bill Kahlstorf, Tupelo obstetrician; vice-president, Dr. Dan Draughn, Jackson pediatrician; secretary-treasurer, Dr. Frank Wilburn, Tupelo pediatrician. The first annual meeting of the society will be held in conjunction with the Mississippi State Medical Association Convention in Biloxi in May.

96th Congress Will Face Budget Cuts

Stringent controls and across-the-board budget cuts will be the order of the day for the coming 96th Congress. President Carter has announced that his anti-inflation program will be the top domestic priority and such sentiment appears to be widespread among returning members.

The Administration's initial thrust in the health area will be its demand for the hospital cost containment program that was blocked in the last Congress. In addition, it is expected that the President's chief selling point for his brand of national health insurance (NHI) will be its alleged ability to hold down inflation in the health care sector.

In an important policy address before the National Press Club, Joseph A. Califano, Secretary of the

Health, Education and Welfare Department, warned that if liberals want federal social programs to survive, they must concentrate on better management of those programs rather than on their expansion.

"It was the challenge of Liberalism in the Sixties to enact long-delayed and much-needed social programs," Califano said. "It is the challenge for Liberalism in the Seventies to manage these programs well."

"As we come to the close of the Seventies, the challenge for the American Liberal is the challenge of austerity," Califano said.

There is a management revolution underway in Washington, the HEW Secretary said, an "effort to make compassionate programs work efficiently."

He said it is essential for Liberals to recognize that times have changed, that "the self-confidence of the Sixties has been replaced by a mood of caution, wariness, and skepticism."

Califano didn't say where the economic ax will fall at HEW except to note some long-standing targets such as impacted federal aid for schools and the hospital cost containment plan. Of the latter, he said House Speaker Thomas O'Neill (D-Mass.) has promised early House action next year. "We will drive that legislation through next year," he said.

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Other guest discussants for the conference are Dr. F. G. Pearson, professor of surgery, University of Toronto, Toronto, Canada, and Dr. Bob G. Eaton, professor and vice-chairman, Department of Radiologic Sciences, University of Oklahoma School of Medicine, Oklahoma City.

Other program participants include Dr. Dick D. Briggs, Dr. Larry K. Johnson, Dr. Drayton M. Sanders and Dr. Roy M. Arnold, all of the University of Alabama Birmingham Medical Center; and Dr. Bill Boyd and Dr. Mike Kirkpatrick of the University of South Alabama Medical Center, Mobile; Dr. Brooks Emory and Dr. Paul DeCamp, both of New Orleans, and Dr. Richard Reynolds and Dr. Lex Hubbard, both of Shreveport, LA.

Topics of interest to thoracic specialists to be presented include "Cavitary Lung Disease," "A Potpourri of Respiratory Failures," "Pleural Effusions and Diagnostic Thoracoscopy," "Clinical and Roentgenographic Aspects of Blastomycosis," "Granulomatous Dilemmas" and "Industrial Related Lung Diseases."

Physicians interested in further information are requested to contact the Mississippi Thoracic Society, P.O. Box 9865, Jackson, MS 39206.

Tri-State Thoracic Conference Is Scheduled

Fifteen speakers from medical centers throughout the United States will be featured at the 23rd annual Tri-State Thoracic Consecutive Case Conference to be held Jan. 14-15, 1979, at the Hilton Hotel in Biloxi.

Dr. Joe R. Norman of Jackson, president of the Mississippi Thoracic Society, announced that the two-day event, a professional education conference for physicians of Mississippi, Louisiana and Alabama is sponsored by Lung Association and Thoracic Societies of the Tri-State area.

Mississippi physicians featured on the program include Dr. A. Jerald Jackson and Dr. Charles Parkman, both of Hattiesburg; Dr. Dewey H. Lane of Pascagoula; and Dr. John D. Morgan of McComb who will serve as moderator for the Mississippi session.

Dr. John G. Weg, professor of internal medicine and physician in charge, pulmonary division, University of Michigan Medical School, Ann Arbor, MI will deliver the keynote address on Jan. 12.

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ORIGINAL PAPERS

Cervical Pregnancy: Report of a Case

WILLIAM B. WIENER, M.D.

Jackson, Mississippi

CERVICAL pregnancy is a very rare complication of gestation. Most authors quote an incidence of around 1 to 16,000. However, Shinagawa et al recently reported an incidence of 1 to 1,000 in Japan. They attributed their increased incidence to legalization of abortion which was followed by a large number of pregnancy terminations. The diagnosis is difficult to make clinically and is usually made in surgery. Probably many early cervical pregnancies spontaneously abort without any problems.

Most authors refer to Rubin's paper of 1911 which innumrated the four criteria for pathological diagnosis of cervical pregnancy and this was on the basis of the removed uterus. These criteria were as follows:

- 1) There must be cervical glands opposite the placental attachment.
- 2) Attachment of placenta to the cervix must be intimate.
- 3) The whole or portion of the placenta must be situated below the entrance of the uterine vessels or below the peritoneal reflection of the anterior and posterior surfaces of the uterus.
- 4) Fetal elements must not be present in the corpus uteri.

Case Report

The patient, a 17-year-old white female, was first seen in the office on Aug. 29, 1978, complaining of a malodorous vaginal discharge and irregular menstrual periods. She stated that she had seen her local physician on April 6, 1978, and told him she had been sexually active. She did not think she had missed any menstrual periods and she was given a prescription for birth control pills. Four days before being seen here, she noticed a low grade fever and

the day before her fever rose to 102°F. She had a bloody malodorous discharge and thought she had left a tampon in the vagina. At this visit she stated she had not had intercourse for over three months but she did consider the possibility of pregnancy and requested a pregnancy test. On pelvic examination at this time the cervix was found to be completely

Cervical pregnancy is a rare complication of gestation but the incidence may be increasing with the legalization of abortion. These pregnancies rarely go past 18 to 20 weeks of gestation and treatment should consist of removal of the products of pregnancy and controlling the bleeding. Prompt diagnosis and treatment are necessary if mortality is to be reduced. Often hysterectomy is required to control the bleeding, as in the case reported by the author.

effaced and what was thought to be the products of pregnancy noted just inside the external os. The uterus was thought to be enlarged to the size of a three months' pregnancy. The pregnancy test was positive. She was immediately sent to the hospital. On admission her hemoglobin was 13.3 with a 41.1 hematocrit. She was taken to surgery and under spinal anesthesia was prepared and draped for pelvic surgery. After a bimanual examination had been done, an attempt was made to remove the products of pregnancy from the uterus with ring forceps. A large amount of tissue was obtained and when it was thought that the uterus was emptied the cavity was curetted. As she began to bleed rather heavily again the ring forceps were used in an attempt to see if there was any further tissue left in the cavity. At this time a segment of small intestine was pulled through the

Practicing obstetrician-gynecologist, Jackson, MS.

CERVICAL PREGNANCY / Wiener

vagina. The intestine was replaced and the patient advised that we would have to do a laparotomy. She was taken out of the stirrups and prepared for an abdominal exploration. On entering the abdominal cavity a tear was noted in the peritoneum on the right side just above the bladder. Above this rent a normal size uterus was noted. There was a moderate amount of blood in the abdomen with some bleeding from this rent. At first it was thought there might be a possibility of repairing the tear so consultation was obtained. It was decided that repair was impossible therefore an abdominal hysterectomy was done. During and after surgery she received three units of blood. Postoperatively, she did well and was discharged home June 5, 1978.

Pathology

Two specimens were received. One was the products of pregnancy and the other was uterus. The curettings and removed products of pregnancy showed a chorionic cavity with approximately 2.5 cms. in greatest diameter and fetal parts. Microscopic sections on these showed placental tissue with large areas of hemorrhage and mild to moderate acute inflammatory and focal necrosis. The uterus and cervix measured $5.5 \times 4 \times 5.3$ cms. The cervix and endocervix were markedly dilated and measured 8×4.5 cms. There was a large defect in the posterior wall of the uterus at the junction of the endocervix with the body of the uterus. The defect measured approximately 5 cms. in greatest diameter. The

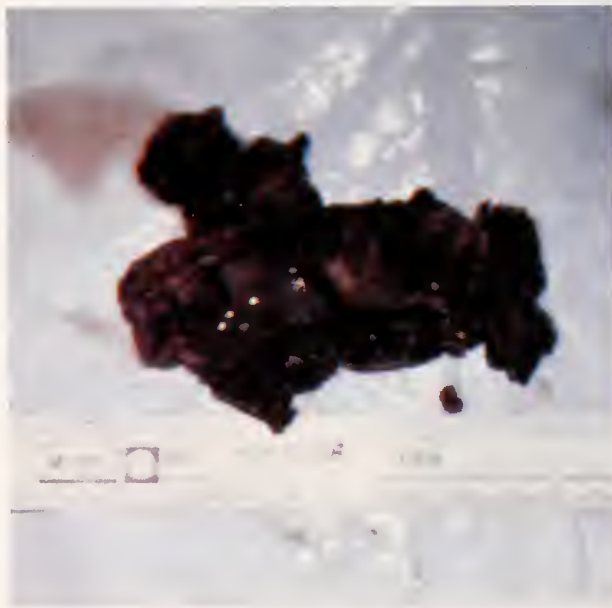


Figure 1. The removed products of pregnancy.

internal surface of the cervix and the endocervix were covered by a shaggy, brownish, red tissue consistent with decidua and placental tissue. The wall of the cervix was thin measuring only about 3 mms. in thickness. The cervical os had an irregular shape and measured 1.8 cms. in greatest diameter.



Figure 2. Posterior view with uterus opened posteriorly. Probe is in external os.

The endometrium measured 8 mms. in thickness and had a corrugated texture. The myometrium measured 1.5 cms. in thickness and had a slight soft consistency. Microscopically the cervix showed a large area of decidual reaction with trophoblastic tissue. The trophoblasts extended into the wall of the cervix. The wall of the cervix was very thin and the cervix also showed chronic inflammation. At the edges of the rupture necrosis, hemorrhage and inflammation were noted. The final pathological diagnosis was degenerating products of conception, cervical pregnancy with posterior rupture of the cervix, secretory endometrium with decidual reaction and normal myometrium.

Discussion

Cervical pregnancy is rarely recognized prior to curettage or instrumentation. Paalman et al in 1965 tabulated the following clinical signs of cervical pregnancy:

- 1) Amenorrhea followed by uterine bleeding without cramping.
- 2) A softened and disproportionately enlarged

cervix equal to or larger than the corporal portion of the uterus.

3) Products of conception entirely confined within and firmly attached to the endocervix.

4) A snug internal os.

5) A partially opened external os.

The majority of these patients bleed profusely when an attempt is made to remove the products of pregnancy and quite often, as occurred here, the uterus or the cervix is ruptured. While at times conservative measures such as packing of the uterus, suturing of bleeding areas or ligating the hypogastric arteries may be all that is needed, the majority of times a total abdominal hysterectomy must be done as there is usually profuse bleeding. Adequate blood must be administered. The mortality from ectopic pregnancy has been recorded at 6 per cent in some papers and up to 50 per cent in others.

Conclusion

Cervical pregnancy is a rare complication of gestation but its incidence may be increasing with the legalization of abortions. These pregnancies rarely progress beyond 18 to 20 weeks of gestation. Treat-

ment should consist of removal of the products of pregnancy and controlling the bleeding. Often hysterectomy is required to control the bleeding. Adequate blood must be given. With prompt diagnosis and treatment the mortality should be reduced. ★★★

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Low Back School: A Conservative Method for the Treatment of Low Back Pain

EDWARD A. ATTIX, M.D. and MARY A. TATE, R.P.T.

Hattiesburg, Mississippi

THE MEDICAL literature has documented well the fact that many of the degenerative changes in the lumbar spine are a result of postures and habits that characterize our society. These degenerative changes often result in the production of painful symptoms. It has long been recognized that by properly informing and instructing patients with low back pain, these destructive habits and postures can be altered and pain can be relieved without resorting to more radical and expensive forms of treatment.

There are two factors that make this re-education imperative. First, the offending nucleus pulposus, even though quite thoroughly removed at surgery, will be regenerated by the body. Second, if the nucleus is not regenerated and the offending interspace is fused, the next level above the fusion will become the focus of lordotic stresses and ultimately the level of pain production.

In the past, efforts at re-educating patients have been frequently restricted to providing them with one of several copyrighted booklets about the care of the low back. Most of these are excellent; but these booklets no more insure proper education than handing one a Latin dictionary makes one a Latin scholar. We propose to outline one method for establishing a program which will provide more effective instruction for patients, with the expectation that they will be able to apply this knowledge in their daily lives and avoid more radical treatment.

Organization

We are aware of the organization of the other Low Back Schools which utilize a different approach. The one in Toronto is probably the best known and consists generally of a series of four lectures to groups of patients in a classroom environment. There is no question that the quantitative impact of that type of instruction is far reaching. But we feel that a system in which *one* therapist is involved in instructing and

guiding *one* patient leads to even greater benefit to the individual and permits the individualization of instruction to the needs of the patient. Certainly the needs of a man who does heavy manual labor are

A method of individual instruction by a physical therapist is described in which the patient is evaluated for habits, postures and muscle-strength relevant to the production of low back pain. The patient is then instructed in pertinent anatomy and proper posture for performance of the activities of daily living; appropriate exercises are prescribed. Effectiveness of the instruction is measured by improvement in the patient's score on an Obstacle Course at the completion of his instruction. This conservative therapy is an effective adjunct as well as an alternative to surgery on the lumbar spine.

entirely different from those of a housewife, for example. Generalization serves to dilute the impact of the instruction on the individual patient. We will present the linear organization of our Low Back School which generally consists of three separate sessions. The sessions are usually separated by an interval of at least one to two weeks so that the patient can thoroughly absorb and apply the information. Also he will have time to reflect on the instruction so that he can ask questions that will help us solve his individual and unique problems.

Introduction

When a patient is proposed as a suitable candidate for instruction in the Mississippi Low Back School, he is given an introductory pamphlet which stresses his *own responsibility* for the care of his back and avoidance of symptoms. Our aim is to make him a responsible custodian of his spine so that he will not have to rely on braces, hospitals, pain medication

Practicing orthopedic surgeon, Hattiesburg, MS.

and surgery. He also receives a booklet on the care of the back, entitled *Your Back*, which he can use as a reference during his instruction and as a refresher after he has completed his training.

Evaluation

The physical therapist first carries out a full and separate evaluation from that of the orthopedic surgeon. This includes a questionnaire completed by the patient concerning activities that aggravate or relieve his symptoms. It also includes a pain drawing by the patient which often provides important clues to the involvement of emotional and neurotic elements in the patient's pain problem.

Special attention during the evaluation is directed to detect the presence of flexion contractures of the hips, lordotic contractures in the lumbar spine and shortening of the heel cord, since any one of these deformities may be responsible for recurrence of low back symptoms in spite of any other treatment carried out.

Obstacle Course

The use of an obstacle course is an integral part of this program and helps to distinguish it from other more didactic classroom programs. Such programs often use a written examination at the completion of instruction in order to measure the efficiency of the instruction. We feel that the most important criterion is whether the patient is able to apply this information to his regular activities. An obstacle course such as the one described here should give an accurate assessment of such ability. As a practical measure, arbitrary numerical values are awarded for performing the various activities with the lumbar lordotic curve obliterated or minimized. At the beginning, standing posture is photographed against a graph and the patient is allowed to see for himself the alignment of his lumbar spine in the photograph. It also serves as a reference for the instructor and the patient as they progress. This original photograph is kept in the patient's record.

Sitting posture is next examined and similarly graded. Then crouching, forward bending, reaching, lateral bending and twisting are examined. These activities are evaluated by asking the patient to move cartons about the room reserved for the Obstacle Course. Push and pull activities are tested by having the patient manipulate a shopping cart similar to those used in grocery markets.

His posture while crawling over and under barriers is tested by pulling out two plastic ropes, one about two feet from the floor over which he climbs, and one about three feet from the floor under which he

crawls. His performance is graded numerically.

Lifting postures are checked, with special attention to the position of the shoulders and feet before lifting begins, as well as the presence or absence of lumbar lordosis and abdominal muscle tone during the act of lifting. Walking postures are also checked and graded; then finally we examine his postures while lying down with a number of pillows available for his use to determine how effectively he rests his lumbar spine in bed.

The apparatus for this obstacle course is easily included in one examining room measuring about 14 by 10 feet. All of our special equipment for these examinations is kept in this one room. As mentioned above, certain numerical values are awarded for proper performance of all activities: a perfect score would be 100 per cent. Most patients entering the program score between 20 and 40 per cent. Not surprisingly, those with more acute symptoms usually score higher than those with relatively less severe complaints, probably because those with more pain have already begun to learn something about proper body mechanics.

Anatomy

Having completed the evaluation, the patient next receives instruction in basic anatomy of the lumbar spine and how his faulty postures and habits can result in accelerating the degenerative processes and ultimately produce painful conditions in the low back. Some of this instruction on the anatomy of the spine is packaged as a prepared sound-slide program which should be easily understood by any one accustomed to commercial television and motivated by his own painful symptoms. Additional instruction using a model demonstrating the lumbar spine, or herniated disc or the isthmic defect of spondylolisthesis is also provided, depending on the patient's diagnosis and stage of treatment. With a limber model of the spine it is possible to demonstrate very impressively the effect of various muscle groups on the alignment of the lumbar spine and the stresses imposed by lumbar lordosis.

Muscle Testing

The patient is now prepared to realistically assess his own physical fitness (or lack thereof), having learned something about the anatomy and degenerative changes that occur as a result of a lordotic lumbar curve. The negative effects of contracture in the Achilles mechanism, hip flexors, and lumbodorsal fascia are dealt with through special stretching exercises if they are appropriate. In our experience, these contractures are an unusual factor though quite

LOW BACK SCHOOL / Attix and Tate

significant if present. Much more important to a favorable response is the accurate assessment of relative weakness in four major muscle groups which assist in anterior tilt of the pelvis and obliteration of the lordotic lumbar curve:

- a. The abdominal-wall muscles
- b. The iliopsoas muscles
- c. The gluteal muscles
- d. The quadriceps muscles.

It is basic to an understanding of the whole problem of low back pain in our society to realize that our lifestyle frequently results in relative weakness in these four muscle groups as we enter our middle years. The development of adequate strength in these four muscle groups serves as a reasonable objective for the patient; he comes to understand his own responsibility for developing this strength as a prerequisite to his recovery from his painful symptoms.

Assessment of the abdominals is most safely performed by the use of partial sit-up (see Figure 1); this is, in effect, an isometric contraction of the muscles of the abdominal wall. Any other form of sit-up would run some risk of severely increasing intradiscal pressure and possibly increasing the patient's symptoms or producing a herniation of the nucleus pulposus.



Figure 1

The iliopsoas functions as a flexor of the pelvis only when the lower limb is fixed to the ground in the normal weight-bearing posture and is difficult to test separately. The gluteal muscles similarly function to produce anterior tilting of the pelvis only when the lower limb is weight-bearing and are difficult to assess separately.

Much more important to the clinical situation is an assessment of the strength of the quadriceps-extensor muscles of both thighs. As a consequence

of our relatively sedentary life, these muscles are very seldom stressed by walking, running, climbing or squatting and are frequently quite weak. The very fact of their weakness forces the patient into lordotic postures and habits that culminate in painful conditions in the lumbar area. Obviously no rational plan for treatment would be complete until these muscles were strengthened sufficiently so that the patient could perform his everyday activities without producing lumbar lordosis.

A very practical method of testing the strength of the quadriceps is to have the patient perform a wall slide exercise; it serves initially as a measure of the strength of his quadriceps muscles and eventually as an isometric exercise for these muscles which the patient performs at home. A wall-slide is performed by the patient standing with his heels 12 to 15 in. from a wall, his knees bent and his lumbar spine flattened against the wall, taking care to be certain there is no lordosis present in the lumbar area. The patient then lowers his body until the tops of his thighs are close to the horizontal (see Figure 2) and then holds this position as long as he can without discomfort in his quadriceps muscles. Most patients



Figure 2

on entering the instruction cannot hold this isometric contraction for more than 10 or 15 seconds and many will have to compromise on a less strenuous angle at the beginning (see Figure 3).



Figure 3

We have found it more effective to begin by asking the patient to come down in the wall-slide to a position which he can maintain for two minutes at a level of comfort. As his strength increases, he is able to approach the position with his thighs horizontal and hold that position for 2 minutes. We feel that an ability to hold this position for 2 minutes is an index of satisfactory strength in the quadriceps to permit the application of good body mechanics. If he does not achieve this level of strength, he will certainly be very likely to continue to experience painful symptoms in his everyday life.

Both the iliopsoas and gluteus muscle groups are strengthened by performance of a pelvic tilt performed in the supine position. This is a particularly important movement for the patient to learn since he will be asked to use it to obliterate his lumbar lordosis and set his spine in the proper position for various postures and power movements. We feel that, once the patient has learned to perform a proper

pelvic tilt whether lying, sitting, or standing, he has reached a very important plateau in his recovery.

When all four muscle groups have been tested, a program of exercises for these muscle groups is prescribed and the goals as far as strength and endurance are set so that the patient has a definitive endpoint toward which he will direct his attention. The patient's responsibility for his own well-being is thus reinforced. We feel that this is a positive factor and places the responsibility for his recovery on the patient rather than on the medical and paramedical personnel.

Activities of Daily Living

The next step is to re-educate the patient in the proper way to perform the ordinary activities of his everyday living. Beginning with how to get up out of bed, the patient is carried through a long list of activities — brushing the teeth, putting on shoes and stockings, reaching, bending, lifting and getting in and out of chairs (as well as telling him how to select the most appropriate chair). In this phase of the program, the one-on-one concept is especially effective and obviously may be adjusted on the basis of the patient's sex, habitus, and occupation. This brings up discussions of appropriate footwear, for example: high heels in women increase the lumbar lordosis and obviously will aggravate symptoms; while in men, the discussion centers around stresses on the low back by putting on and taking off lace-up shoes and cowboy boots. For both sexes, we encourage the use of low-heeled, slip-on oxfords. Many activities will apply to almost all patients and certainly must be discussed and explained: how to stand for long periods, proper posture for walking, pushing, pulling and lifting. Indeed, one of the most important points to cover is the appropriate sleeping posture; instruction in the proper sleeping posture will relieve the dull, aching low back pain with which so many patients awaken in the morning.



Figure 4

LOW BACK SCHOOL / Attix and Tate

Problem Solving Session and Individualization

Although the entire educational process is individualized in the sense that the instructor is only dealing with one student and can repeat or reinforce the instruction where the patient does not seem to be grasping the material, very serious attempts are made near the end of the second visit and throughout the third session to cover those activities most appropriate to his or her needs. In general, the patients may be placed in one of three general programs. The first is one designed for housewives, with special attention to dishwashing, vacuuming, sweeping, mopping, washing windows, making beds and doing the laundry. The second is intended to cover most of the activities of white-collar occupations: sitting postures for desk work, typing, and telephoning, and filing, operating computers, etc.

This third program is one intended for so-called blue-collar workers. In this program the use of wheelbarrows, paint brushes, levers and other specialized tools may be the most important phase of the instructive process. There are also some activities important to all persons doing this kind of work such as lifting, toting and lowering. About half of the instruction is spent in covering those activities which are involved in the patient's own job description. Obviously, teaching a truck driver or operator of heavy equipment how to adjust his seat is the most important advice we can give. Sometimes it is necessary to arrange for some type of special seating for the patient.

Finally, the patient's hobbies and avocations are discussed. If he is an avid fisherman, the regular use of a bass-boat may help him to avoid the backache which often follows sitting on the low seats with which most row boats are equipped. Special instructions about how to lift an outboard motor out of the trunk of an automobile may help the patient to prevent a serious aggravation of his symptoms. Again, the principle of individualizing the instruction is an important concept to the success of the program.

Graduation

Having completed at least three visits to the Low Back School and having had the instruction individualized to the patient's particular situation and occupation, the patient is finally asked to demonstrate how well he is able to apply his instruction and exercise program to the same Obstacle Course he challenged at the initial session. During the entire experience from beginning to end, he is encouraged and rewarded verbally for evidence of his under-

standing and improvement. He is continuously pointed toward successfully completing his instruction and *graduating* from the program with a diploma that will testify to the success of his efforts. If we have been effective, and assuming the patient has applied himself both mentally and physically, he should finish the final examination with a triumphal score of 85 per cent or more on the Obstacle Course. If he scores over 85 per cent, he is given a diploma and complimented on his success. This again reinforces his feeling of responsibility for his own welfare and behavior.

An important corollary is this: if the patient fails the second Obstacle Course, it suggests that he has not properly applied himself. Further effort on our part will probably serve to reinforce feelings of dependency and will not really advance his own feeling of responsibility for his symptoms and behavior. It is felt that far too little has been said about the patient's responsibility for helping us to unravel his particular diagnostic problem. It is especially important that he recognize his own involvement in the solution of his problem. As in so many other areas of medicine, a favorable result depends just as much on the effort of the patient for its solution as it does upon that of the physician and the paramedical personnel.

Summary

1. Most low back pain is the result of degenerative changes in the lumbar spine that are directly related to our habits and postures.

2. The basic problem is one of a species-inherent lumbosacral lordosis: this disparate loading of the posterior portion of the lower lumbar spine intervertebral discs and neural arches is responsible for most of the syndromes which produce painful symptoms in the low back.

3. Many of these habits and postures are based on certain societal factors; they can be easily altered when the patient understands that they will eventually produce painful symptoms.

4. With a program of intensive instruction in the anatomy, physiology and dynamics of the lumbar spine it is possible to significantly alter the progress of degenerative changes in the lumbar spine. Organization is in a linear fashion, progressing from introduction, to a physical assessment, utilizing an Obstacle Course to give you an assessment of the patient's muscular power in four major muscle groups. The patient is next instructed in the anatomy and proper posture for the activities of daily living. The program is next individualized and certain problems relative to the patient's occupation and lifestyle are dealt with.

Suite 205 Medical Plaza (39401)

Special Article

(Editor's Note: The following article, second of a three-part series concerning health planning in Mississippi, is reprinted with permission of The Sun-Herald, Biloxi-Gulfport, published Oct. 15, 1978.)

Too Many Beds, Not Enough Care

By EDITH BIERHORST BACK
Sun-Herald Staff Writer

A primary cause of rising costs of medical care is "more" — more nursing homes, more hospital beds, more expensive equipment duplicated unnecessarily and thus under-utilized.

At the same time, there is not enough basic medical care — access to doctors and clinics — especially for rural and low-income people. As a consequence, many consumer members of health planning boards vote for any additions to the system, according to Russell Swansburg, who served on the Southern Subarea Council until recently.

"Many people have the impression that more is better, and if there is more, maybe we can all get some," he said. But it is more institutions and not basic care the public is getting, he said.

The health planning law calls 80 per cent a desired average occupancy rate for a hospital. The overall rate in this state is 64.9 per cent, ranging from the Pascagoula area (George and Jackson Counties) rate of 81.3 per cent to a low of 40.9 per cent in the Vicksburg service area. The Gulfport area, composed of Hancock, Harrison and Stone counties, has an overall hospital occupancy rate of 52.7 per cent.

When all currently approved nursing homes are completed, Mississippi will have 2,800 more nursing home beds than are needed, according to Dr. James B. Moore of MHPDA. Also, by expanding nursing homes instead of creating alternative kinds of living arrangements for elderly citizens, the tendency will be to fill the homes with people who do not need to be in these expensive facilities.

In Mississippi, 92 per cent of all nursing home patients have their bills paid by Medicaid. The cost, \$36 million in 1976, rose to \$46 million in 1977, and is expected to exceed \$60 million this year.

The health planners' ability to review nursing

home expansion has been "undermined" by a recent action of the Mississippi Medicaid Commission, according to Moore.

Nursing homes are paid \$21.50 a day for intermediate care and \$25 for skilled nursing home care. Last year, the commission, on the recommendation of the Nursing Home Association, created the dual classification, under which a home is paid \$24.50 for each patient. Moore calls this "the \$10,000,000 decision," made without involvement of health planners, and a "flagrant violation" of the state plan. Moore said it is a "decision in favor of the nursing homes which many people feel are already operating on the largest profit margin in the health care industry," a margin he said is between 25 and 30 per cent.

Moore as well as St. Clair, Smith, and Swansburg said that decisions of this kind prevent the development of alternative kinds of care.

One alternative to institutional or fee-for-service medical care is medical group practice, known as Health Maintenance Organizations, wherein comprehensive medical care (including hospitalization) is provided an individual or family by paying an annual premium.

Mississippi is the only state in the southeast lacking an HMO. Several attempts failed because of physician opposition to having doctors paid a salary instead of being paid for each individual service, according to HEW spokesmen.

Michael Lanzilotta, HEW's HMO representative in the Atlanta regional office, however, said there is renewed interest recently, but it is coming from industry.

"I am getting calls from employers asking about this because their health care costs are skyrocketing," Lanzilotta said. "They're going up 30 per cent a year and the employers can't suffer the increase without affecting their ability to do business. But benefits don't increase, so it's more money out of the employer's pocket."

Dr. Carl Evers, president of the Mississippi State Medical Association, was asked about physician opposition to HMOs. He said the association has not yet taken a position, and such opposition is now that of individual doctors. Later this year, he said, the association's House of Delegates will discuss this and other matters relating to health costs to present an association position.

MEETINGS

National and Regional

American Medical Association, James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.
 Louisiana-Mississippi Ophthalmological & Otolaryngological Society, April 19-20, 1979, Broadwater Beach Hotel, Biloxi, MS. Ben A. Davis, Jr., CAE, Executive Secretary, P.O. Box 12314, Jackson, MS 39211, telephone (601) 956-7787.
 The New Orleans Graduate Medical Assembly, "Management of Common Problems in Office Practice — Update"; April 27-May 1, 1979, The Fairmont, New Orleans, LA. Lois Neary, Executive Director, 1430 Tulane Avenue, New Orleans, LA 70112.

State and Local

Mississippi Academy of Family Physicians, Annual Meeting, July 11-14, 1979, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.
 Mississippi State Medical Association, 111th Annual Session, May 7-10, 1979, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.
Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638, Counties: Amite, Wilkinson.
Central Medical Society, 1st Tuesday, January, April, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., B6 Medical Arts Bldg., 1151 N. State St., Jackson 39201. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson, Yazoo.
Clairborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Clairborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.
Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 p.m., Clarksdale. Henry McCrory, Secy., P.O. Box 340, Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.
Coast Counties Medical Society, 1st Wednesday, January, March, May, September and November. H. S. Barrett, Secy., P.O. Box 1898, Gulfport 39501. Counties: Hancock, Harrison, Stone.
Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington.
DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.
East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. W. W. East, Secy., P.O. Box 4128 West Station, Meridian 39301. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.
Homochitto Valley Medical Society, 1st Tuesday, February, June, September, December, Ramada Inn, Natchez. Walter T. Colbert, Secy., P.O. Box 1167, Natchez 39120. Counties: Adams, Jefferson.
North Central District Medical Society, 3rd Wednesday, March, June, September, December. Bernard Hunt, Secy., 1196 Mound St., Grenada 38901. Counties: Attala, Carroll, Chocataw, Grenada, Holmes, Montgomery, Webster.
Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. James M. Cooper, Secy., 605 Garfield St., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, March, August, December. Cherie Friedman, Secy., 424 South 5th, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.
Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.
Prairie Medical Society, 2nd Tuesday, March, June, September, December. George Walker, Secy., 102 W. Lampkin St., Starkville 39759. Counties: Clay, Oktibbeha, Lowndes, Noxubee.
Singing River Medical Society, 3rd Monday, February, May, August, November. D. W. Lamppin, Secy., P.O. Drawer J, Pascagoula 39567. County: Jackson.
South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.
South Mississippi Medical Society, 2nd Thursday, March, June, September, December. Clyde Allen, Secy., 1245 N. 6th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.
West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, Secy., The Street Clinic, Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the individual institution or organization.

Mississippi State Medical Association
 Council on Scientific Assembly
 Box 5229
 Jackson, MS 39216
 Charles L. Mathews, Executive Director

Mississippi Urological Association
 118 Broad Avenue
 Gulfport, MS 39501
 Ronald L. Brown, M.D., Secretary

Mississippi Radiological Society
 University Medical Center
 2500 North State Street
 Jackson, MS 39216
 John Y. Gibson, M.D., Secretary

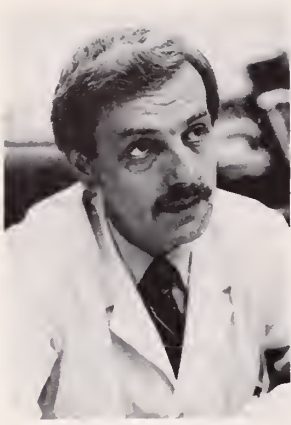
Mississippi Chapter, American College of Surgeons
 The Street Clinic
 Vicksburg, MS 39180
 W. Briggs Hopson, M.D., Secretary

Mercy Regional Medical Center
 Vicksburg, MS 39180
 John R. Shell, M.D., Chairman, Medical Education Committee

Mississippi Baptist Medical Center
 1225 North State Street
 Jackson, MS 39201
 John F. Busey, M.D., Director of Medical Education

Delta Medical Center
 1400 E. Union Street
 Greenville, MS 38701
 W. C. Yarbrough, M.D., Chairman, Medical Education Committee

Northwest Mississippi Regional Medical Center
 Box 1218
 Clarksdale, MS 38614
 Glenn Wegener, M.D., Chairman, Medical Education Committee



The President Speaking

Let's Avoid the Factors That Have Damaged Labor's Political Clout

CARL G. EVERS, M.D.
Jackson, Mississippi

Our AMA federation must shun the internal damage that has made organized labor much less effective in Washington, D. C., than the publicity accorded its leaders might suggest.

"Big labor isn't very big anymore," liberal syndicated columnist Nicholas von Hoffman wrote in the December issue of *Harper's*, adding, "the labor lobby has come down with pernicious anemia."

He further said:

"Without a kick in the pants of the kind unions can no longer deliver, labor must suffer increasing rejection from the national government. The last session of Congress saw organized labor lose almost everything it wanted, in particular the labor-law reform bill. . . ." That bill would have eased the unions' organizing efforts.

As the primary reason for the loss of clout, von Hoffman cites the falloff in union membership to only about 20 per cent of the labor force. "Since 1974, unions have lost more than half a million members, while in the same period the economy added 6 million new jobs."

The lack of unity in the union movement could well be an additional reason, we believe. For example, the only three unions with more than a million members (according to the 1978 *World Almanac*) — the Teamsters, United Auto Workers, and National Education Association — are unaffiliated with the AFL-CIO.

In contrast with organized labor, the AMA has been effective in Congress and has improved its relations with the White House. To remain effective, however, our federation must grow in its proportion of the total number of physicians and in unified membership.

In the 1977-78 Congress, our federation was instrumental in the demise of such offensive bills as:

- A bill to extend Federal Trade Commission jurisdiction to non-profit organizations, which would include the AMA, its component societies, and medical-specialty societies. Along with eliminating Congressional sanction of the FTC's current anti-trust action against physician solicitation of patients, the bill's death is likely to help us if the FTC administrative judge's adverse ruling on the issue has to be carried as far as the federal courts.
- A Health Planning Act amendment that would have extended certificate-of-need provisions to purchase of new equipment by physicians' offices.
- Mandatory cost containment, as contrasted with the Voluntary Effort spearheaded by the AMA, the American Hospital Association, and the Federation of American Hospitals, with splendid support from their state bodies.
- The proposed Clinical Laboratory Improvement Act, which would have set national standards for the training of lab technicians and harassed lab procedures in many physicians' offices.
- The drug regulation reform bill, which would have further muddled the development, distribution, and use of beneficial drugs.

Let's sustain our impact. In 1979 let's all work for increased membership growth and unity within the federation.

★★★

EDITORIALS

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

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Sudden Deafness

Over the past several years, an increasing number of patients have been seen with the clinical problem of acute or sudden deafness. In contrast to the more frequent and slowly developing forms of deafness, both conductive and neurosensory in type, acute deafness is characterized by the sudden abrupt loss of hearing in one or both ears. Patients usually describe a popping sensation in the involved ear immediately preceding the onset of complete loss of hearing. Approximately 40,000 cases occur per year in the United States. Viral infections involving the cochlear, vascular occlusion usually involving the terminal branches of the internal auditory artery, and trauma are all considered causes of acute deafness. The traumatic form is usually associated with rupture of the round window, thereby allowing perilymph to leak into the middle ear.

Approximately one third of the patients experiencing sudden deafness recover spontaneously without therapy. The majority of the remaining two thirds will recover hearing if treated early and vigorously.

As soon as possible after the occurrence of acute deafness, complete physical examination, audiometric assessment, and vestibular evaluation should be carried out. The studies are supported by x-ray examination of the temporal bone and other laboratory studies as indicated. Patients thought to have a viral or vascular etiology are immediately hospitalized and treated with Stellate ganglion block, anticoagulants, and intravenous Procaine. This therapy is basically designed to increase blood flow to the involved cochlea. In traumatic cases with rupture of the round window, immediate surgical intervention and repair is indicated.

Unfortunately, a large percentage of the patients experiencing acute deafness are not referred for therapy for approximately two to three weeks. By this time, aggressive surgical or medical therapy affords little relief or return of function. Patients experiencing a sudden deafness should be immediately referred for evaluation and treatment.

MYRON W. LOCKEY, M.D.
Associate Editor
Jackson, MS

The Mississippi Foundation for Medical Care — Its Potential

The Mississippi Foundation for Medical Care, created as a brain child of the Mississippi State Medical Association, stands as a tribute to those physicians who with foresight and hard work, sponsored and nurtured the basic concept of the delivery of quality medical care, hopefully defined by the only true monitoring process — "Peer Review."

The Mississippi Foundation for Medical Care was founded in May 1971 by the House of Delegates of the Mississippi State Medical Association. Its objective was to serve as a middle of the road intermediary between the physicians of Mississippi and third party payors, bringing into effect the "Peer and Utilization Review Process" as a buffer to third party claims denial.

Contact with the private insurance industry toward a mutual working interface between insurance companies and physicians was carried out. Further, the professional services of the peer review committee of the foundation were offered in adjudicating claims and controversies between physicians and third party payors. All of this was the creative work of Mississippi physicians seeking the standardization of the delivery of quality medical care.

Then Public Law 92-643 (PSRO) was passed by the Congress in November 1972, with the intent of monitoring medical care for Medicare and Medicaid patients for which the federal government was footing the bill.

Although bearing the trademark of a federal bureaucracy, the Board of Trustees and the House of Delegates of Mississippi State Medical Association believed that the PSRO program could be tailored to the already conceived foundation concept and further, that it would serve as a deterrent to socialized medicine and the threat to the private practice of medicine.

Thus, the House of Delegates in Regular Session, May 1973, directed that the foundation proceed to sponsor PSRO requirements and implement the program. Plans were completed and the foundation was funded by HEW in July 1974.

EDITORIALS / Continued

The intent of the Congress is passing Public Law 92-643 was to make sure that those patients for whose care the federal government was paying received quality medical care for every tax dollar spent, just as you would do if you visited the supermarket and requested the clerk to fill your order for groceries. Before payment, would you not insist on a look into the sack? Uncle Sam calls this the PSRO program principle as it pertains to medical care. He insists on a look into the grocery sack.

The PSRO program was not designed by Congress for cost containment specifically or to interfere with the private practice of medicine. With its present structure, cost control is exerted only by authorizing payment for quality medical care. After all, quality medical care, even with its inflated cost, is in the end the most economical. Whether HEW changes directions and the intent of the law by "rules and regulations" remains to be seen.

Many physicians resisted the PSRO program in the beginning, and some still do, even in Mississippi. However, the majority after becoming involved and working with the peer review concept found that the program was not the monster they perceived it to be and that there were many good points to be recommended. After a careful look at this situation it is apparent that those physicians delivering quality medical care usually keep good records and are proud of their work and happy that their peers have the time and interest to review their records. They are also interested in learning from whatever sources, realizing that good records and medical audit is the basis of the learning process in the practice of medicine.

If the PSRO has done nothing more than teach the physicians of Mississippi the value of good records that reflect the delivery of quality medical care, it has paid its way. Accurate records reflecting quality medical care are a physician's best contribution to the future welfare of his patients and forms the only basis for his defense in liability litigation.

To this date, history indicates that the foundation is successfully fulfilling its mission. The PSRO program has been implemented in 117 of 120 hospitals in Mississippi, meriting the faith and trust bestowed upon it at the time of its inception.

Your foundation has made gradual but continuous progress and through its review system has caused an increased awareness and activity in the efficient delivery of necessary and appropriate quality medical care.

During the first phase of planning, organizing and

implementing the PSRO program in Mississippi, great emphasis was placed on timely records and documentation. The second phase of implementation, the collection of information, has produced a "tank full" of computer data originating from the review process, and affording profiles of hospital and physicians' activities and patterns of medical practice.

Now the time has come to utilize the data for the benefit of the medical profession toward standardizing quality medical care, the original concept for which the foundation was originated. Plans for identifying areas of deficiencies, overutilization and patterns of medical care have been completed. Soon physicians will be furnished their personal profiles of performance so that they might be aware of their patterns of care as compared to their peers. The utilization review committee will be encouraged to seek out deficiencies and to take corrective action.

To eliminate paper work, reduce the physician's time and task in the review system and to serve as an incentive to the "good guys" and the hospitals that qualify, a limited review system, entitled "Focus Review," is to be offered soon. This review system exempts those who measure up with a good record of performance. This plan will resort to retrospective review, almost eliminating concurrent review, and will concentrate on assessment by medical audit, the basic learning process.

Your foundation has grown in strength, stature and prestige, continuing to exert its influence in the field of cost containment and appropriate care by sponsoring, promoting and reviewing the delivery of quality medical care in an efficient manner.

Following a recent assessment of the PSRO program in Mississippi by a team of experts in the field of review, your foundation was rated as one of the top performers in the nation. This does not mean there were no problems. There are. But those problems are being identified as a measure of good performance and steps are being taken for correction.

This should be gratifying to the physicians of Mississippi for there are reasons to believe that some of the PSRO programs whose records have been poor may not survive through 1979.

Following a recent trend in Washington to deregulate industries it is interesting to note that through the PSRO program this is the first time in history that the federal government has offered to allow an industry to self-regulate. Thus far, in Mississippi the program has been directly under the control of the membership of the Mississippi Foundation for Medical Care. It is their program and any changes of policy will come as a direct action of the members

through the Board of Directors. Its potential is challenging and unlimited but there is still much work to be done.

We are all in this together and must exert every effort to assure success. There will always be some type of review system of medical care as long as Uncle Sam pays the bill, whether by physicians, insurance companies or others. The PSRO program is working in Mississippi. Give it your support, for the alternatives are unacceptable!

J. T. DAVIS, M.D.

Medical Director

Mississippi Foundation for Medical Care

Medico-Legal Brief

Liability for Optometrist's Failure To Refer Patient to Ophthalmologist

A patient was entitled to an award of \$25,000 for loss of vision due to an optometrist's negligence in failing to refer her to an ophthalmologist, a Louisiana appellate court ruled.

The patient belonged to an association that furnished medical services to its members. In December 1973, the patient was having trouble with her right eye. She was told she was to see a specialist, but she saw an optometrist. He diagnosed her condition as an early senile cataract and suggested she use sunglasses since the eye was sensitive to sunlight. She said he did not advise her to restrict her activities.

A few months later, when she could not see out of her right eye, she returned to the association's clinic and saw an ophthalmologist. He diagnosed her condition as a detached retina, and referred her to two ophthalmologists in New Orleans. She was treated for von Hippel-Lindau disease, a rare progressive congenital tumor beneath the retina. After two operations, there was still some residual detachment, but the tumor was successfully contained. The patient's vision in her right eye remained poor, however.

A trial court dismissed a malpractice suit by the patient and her husband against the optometrist and the association. Reversing the trial court's decision, the appellate court awarded \$25,000 to the patient and \$2,722.15 to her husband for medical expenses.

The optometrist was negligent for failing to refer the patient to an ophthalmologist and his negligence contributed to the delay in discovering the detached retina, the court said. Moreover, the listing of the optometrist alongside the ophthalmologist's name without distinguishing his professional degree was

an inexcusable charade and deceived the patient, the court said.

The court also held that the optometrist had practiced medicine without a license. — *Fairchild v. Brian*, 354 So.2d 675 (La.Ct. of App., Dec. 28, 1977; rehearing denied, Feb. 13, 1978); cert. denied, 356 So.2d 437 (La.Sup.Ct., March 27, 1978).

PERSONALS

GEORGE E. ABRAHAM, II, announces the opening of an office at 1011 Mission 66 in Vicksburg for the practice of family medicine.

ERLINDA ALCALEN announces the opening of her office for the practice of obstetrics and gynecology at 798 Dunbar in Bay St. Louis.

WILLIAM R. ARNETT (family practice), DONALD V. CONERLY (family practice), KELLY R. O'NEAL, JR. (obstetrics and gynecology), and CHARLES J. PARKMAN (pulmonary medicine) have associated with the Hattiesburg Clinic, P.A., in Hattiesburg.

Gulf Coast Surgical and Diagnostic Center, P.A., announces the availability of DONALD J. BOOTH (surgery) and HARRY B. HEITZMAN (internal medicine) at 201 West Jackson Street in Biloxi.

THOMAS J. BROOKS, JR., of Jackson and UMC won first and second place in the black and white photography category of the Hospitality Month Photo Contest sponsored by the Mississippi A and I Board.

RICHARD E. BUCKLEY of Biloxi took part in a recent Soviet-American Neurosurgery Study Tour to Moscow and Central Asia.

C. E. CATCHINGS, L. J. OWENS and DAVID MCGRAW announce the relocation of their offices from First South Street to Bank Street in Woodville.

ROBERT T. CATES announces his return to the practice of family medicine at Cates Plaza Clinic, 12 Professional Parkway, Jackson.

AMNUEY CHIEMPRABHA has associated with WILLIAM MUNN of Mendenhall for the practice of surgery at Simpson General Hospital.

HAROLD DANGLE is new pathologist and BRYAN VINTERS is new radiologist at Grenada County Hospital.

EDWIN M. DAVIDSON announces the opening of his office for the practice of internal medicine, hematology and medical oncology at 1500 45th Ave., Suite C, in Gulfport.

PERSONALS / Continued

J. F. ECKFORD of Starkville has established a waiting room for expectant fathers at Oktibbeha County Hospital. The room was furnished with funds given to him on "Dr. Feddy Day" when he was honored by the city in 1967.

LESLIE E. ENGLAND announces the opening of his office for the practice of internal medicine in the Medical Arts Building in Natchez.

TED GOULD has associated with the Charleston Clinic and Tallahatchie General Hospital for the practice of family medicine and obstetrics. Dr. Gould is a native of Ontario, Canada.

JOHN Y. GIBSON of Jackson and UMC attended the meeting of the American Institute of Ultrasound in Medicine held in San Diego.

ARMIN F. HAERER of Jackson and UMC represented the department of neurology at the Society of Clinical Neurology and the annual meeting of the Professors of Neurology in New Orleans.

O. LYNN HAMBLIN announces the relocation of his office to the Medical Arts Building across from Hillcrest in Bruce.

JOE D. HERRINGTON and WALTER E. DAWKINS announce their association as the Family Medicine Clinic of Natchez, P.A., and the relocation of their office to 131 Jeff Davis Boulevard.

THOMAS G. HOLDEN of Grenada is a recent enrollee in the Medical Alumni Guardian Society of the University of Mississippi Foundation.

VERNER HOLMES of McComb addressed the Medical Center chapter of Alpha Omega Alpha at UMC.

JAMES M. HOWELL announces his retirement from the general practice of medicine at 139 Kirkwood Street in Picayune.

FRED HUNT announces the opening of his office for the practice of internal medicine at St. Joseph Medical Plaza, Highway 39 North in Meridian.

ROBERT LOWE of Jackson was recently a guest at the Northwest Mississippi Regional Medical Center in Clarksdale. He taught in-service classes about emergency procedures.

FRANCIS S. MORRISON of Jackson and UMC presented a two-day workshop on hemophilia at the annual meeting of the American Association of Blood Banks in New Orleans during November.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate)

ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

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Antiminth[®]
(pyrantel pamoate)

equivalent to 50 mg pyrantel/ml
ORAL SUSPENSION



a drug of choice in
pinworm infections

Please see brief summary of prescribing information on facing page.

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The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair, little or no self-care).



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The confidence that comes from experience—
one more reason to prescribe

Motrin[®] 400 mg TABLETS

ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. Aspirin used concomitantly may decrease Motrin blood levels.

Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

How Supplied

Motrin Tablets, 300 mg (white)

Bottles of 60

NDC 0009-0733-01

Bottles of 500

NDC 0009-0733-02

Motrin Tablets, 400 mg (orange)

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Bottles of 500

NDC 0009-0750-02

Unit-dose package of 100

NDC 0009-0750-06

Unit of Use bottles of 120

NDC 0009-0750-26

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ANDY MYRICK has associated with the Physicians and Surgeons Clinic of Amory for the practice of general, vascular and chest surgery.

RICHARD W. NAEF, WILLIAM E. BOWLUS and LAWRENCE W. MAHALAK of Jackson announce the relocation of their offices to Suite 220, St. Dominic Medical Offices, 971 Lakeland Drive for the practice of neurology.

EDWIN R. ORR, III, announces the opening of his office for the practice of internal medicine at Doctors Park, 105 Hillcrest Drive in Houston.

RICHARD L. PEDEN announces the relocation of his office for family practice from 1500 45th Avenue in Gulfport to 206 Jeff Davis Avenue in Long Beach.

FEMI OKUNOREN announces the opening of his office for the general practice of medicine in the Colonial Restaurant Building on Highway 78 East in Holly Springs.

JOHN A. PORTER of Brookhaven has been inducted as a fellow in the American College of Obstetricians and Gynecologists.

Gulf Coast Surgical and Diagnostic Center, P.A., announces the opening of its Biloxi office for the practice of psychiatry with WILLIAM B. ROBINSON at 201 West Jackson Street.

PAUL A. ROBERTSON of Biloxi has moved his office for family practice from the Coastal Medical Center to the Norwood Village Shopping Center.

ROLAND SIGLER has set up his office for family practice at Doctor's Park in Houston. He is a native of Montreal.

WILLIAM F. SISTRUNK of Jackson, American Academy of Pediatrics' Mississippi chapter chairman, is leading the state's participation in the academy's action/awareness program focusing on the needs of the nation's children.

JACOB SKIWSKI of Columbus recently spoke to the Soroptimist Club on the need for an adequate infant care center in the city.

STANLEY A. WADE, JR., of Meridian was inducted as a fellow of the American College of Surgeons at the annual meeting in San Francisco.

W. LAMAR WEEMS of Jackson and UMC was visiting professor at the University of Tennessee Medical Center in Memphis.

WINFRED L. WISER of Jackson and UMC was chairman for the scientific assembly of the Fertility and Sterility meeting in Scottsdale, AZ.

POSTGRADUATE CALENDAR

Jan. 26-27, 1979

ADVANCED CARDIAC LIFE SUPPORT
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Anesthesiology and the University of Mississippi School of Dentistry Department of Oral and Maxillofacial Surgery, and the University Medical Center Division of Continuing Health Professional Education.

Coordinators: Thomas J. Herrin, M.D., associate professor of anesthesiology, University of Mississippi School of Medicine, and Joseph Nigliazzo, R.N., Department of Oral and Maxillofacial Surgery, University of Mississippi School of Dentistry.

Open to physicians and registered nurses who have been certified by the American Heart Association in basic life support, this course will be taught by faculty qualified by the American Heart Association as advanced cardiac life support instructors. The two-day program is designed for physicians and nurses engaged in advanced cardiac life support on a daily basis. Fee: \$100.00. Credit: 12 contact hours, 1.2 CEU, Category 1, AMA; AAFP.

DEATHS

HOLLEY, ROBERT L., JR., Oxford. Born Coffeeville, MS, Sept. 26, 1915; M.D., Tulane University School of Medicine, New Orleans, LA, 1940; interned John Gaston Hospital, Memphis, TN, one year; died Oct. 14, 1978, age 63.

KENNEDY, FRANK FOSTER, Aberdeen. Born Youngstown, OH, April 10, 1903; M.D., Tulane University School of Medicine, New Orleans, LA, 1931; interned Charity Hospital, New Orleans, one year; surgery residency, Charity Hospital & South Highland Infirmary, Birmingham, AL, 1932-39; died Oct. 20, 1978, age 75.

MARKETTE, JOHN R., Brookhaven. Born Water Valley, MS, Oct. 18, 1899; M.D., Northwestern University Medical School, Chicago, IL, 1926;

DEATHS / Continued

interned Baptist Memorial Hospital, Memphis, TN, one year; died Sept. 30, 1978, age 78.

MCARTHUR, REUBEN H., JR., Jackson. Born Tallahoma, TN, June 14, 1914; M.D., University of Tennessee School of Medicine, Memphis, 1937; interned Hurley Hospital, Flint, MI, one year; otolaryngology residency, John Gaston Hospital, Memphis, 1945-47; died Oct. 21, 1978, age 64.

WADE, FRANK C., Magee. Born Marked Tree, AR, Aug. 23, 1927; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Baptist Hospital, Jackson, MS, one year; died Nov. 2, 1978, age 51.

WARRINER, RICHARD BASCOMB, JR., Corinth. Born Corinth, MS, May 30, 1909; M.D., Emory University School of Medicine, Atlanta, GA, 1933; interned Grady Hospital, Atlanta, one year; died Aug. 31, 1978, age 69.

NEW MEMBERS

CANDELORA, JOSEPH N., Jackson. Born Floral Park, NY, Oct. 24, 1941; M.D., University of Illinois College of Medicine, Chicago, 1974; interned Santa Clara Valley Medical Center, San Jose, CA, one year; pathology residency, Medical College of Virginia, Oct. 1975-Jan. 1978; elected by Central Medical Society.

CLARK, DOUGLAS E., JR., Tupelo. Born Fayetteville, NC, Jan. 1, 1946; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned Baylor Medical Center, Dallas, TX, one year; radiology residency, same, July 1972-June 1975; elected by Northeast Mississippi Medical Society.

CLAYTON, RALPH S., McComb. Born Ripley, MS, June 16, 1919; M.D., University of Tennessee School of Medicine, Memphis, 1942; interned Baptist Memorial Hospital, Memphis, one year; radiology residency, same, 1946-49; elected by South Central Medical Society.

FANCHER, WILLIAM HENRY, Jackson. Born Carthage, MS, April 26, 1931; M.D., Baylor College of Medicine, Houston, TX, 1956; interned Baptist Hospital, Nashville, TN, one year; anesthesiology residency, University Medical Center, Jackson, MS, Jan. 1960-Dec. 1961; elected by Central Medical Society.

IMRIE, DONALD T., Jackson. Born Rochester, NY, Mar. 27, 1913; M.D., University of Rochester School of Medicine and Dentistry, Rochester, NY, 1939; interned Charity Hospital, New Orleans, LA, one year; orthopaedic residency, same, July 1940-June 1942; orthopaedic residency, Crippled Children's Hospital, Richmond, VA, July 1942-June 1943; elected by Central Medical Society.

MASSEY, WALTER BOYD, Jackson. Born Vicksburg, MS, April 3, 1949; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned UMC, Jackson, one year; otolaryngology residency, same, July 1975-June 1978; elected by Central Medical Society.

NOWELL, RICHARD M., Jackson. Born Philadelphia, MS, Aug. 4, 1941; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned UMC, Jackson, one year; medicine residency, same, July 1974-June 1976; gastroenterology residency, University of Alabama, Birmingham, AL, July 1976-June 1978; elected by Central Medical Society.

O'NEAL, ROBERT M., Jackson. Born Wiggins, MS, Oct. 7, 1922; M.D., University of Tennessee School of Medicine, Memphis, TN, 1945; interned Gorgas Hospital & Baptist Hospital, Memphis, one year; pathology residency, same, April 1947-Dec. 1947; Mississippi State Sanatorium, 1949-52; pathology residency, Massachusetts General Hospital, Boston, MA, July 1952-Mar. 1954; elected by Central Medical Society.

PRICE, JAMES HOWARD, Jackson. Born Tutwiler, MS, Nov. 13, 1929; M.D., University of Tennessee School of Medicine, Memphis, 1954; interned University of Tennessee, Memphis, one year; anesthesiology residency, same, 1961-63; elected by Central Medical Society.

PRICHARD, WALDEMAR LANDRY, Indianola. Born Greenwood, MS, July 9, 1944; M.D., University of Mississippi School of Medicine, Jackson, 1975; interned UMC, Jackson, one year; family practice residency, same, 1976-78; elected by Delta Medical Society.

SABIN, JAMES S., Meridian. Born Greenwood, MS, Aug. 9, 1946; M.D., University of Mississippi School of Medicine, Jackson, 1972; interned and psychiatry residency, UMC, Jackson, 1972-75; elected by East Mississippi Medical Society.

SANDERS, HENRY J., III, McComb. Born McComb, MS, July 19, 1941; M.D., University of Mississippi School of Medicine, Jackson, 1966; interned Baptist

Memorial Hospital, Memphis, TN, one year; ophthalmology residency, UMC, Jackson, 1971-74; elected by South Central Medical Society.

SCHREITER, SPENCER L., Jackson. Born Normal, IL, May 24, 1944; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned UMC, Jackson, one year; internal medicine residency, same, 1972-74; hematology residency, same, 1976-78; elected by Central Medical Society.

SHAPPLEY, NATHAN P., III, Hattiesburg. Born Tallahassee, FL, May 22, 1945; M.D., University of Mississippi School of Medicine, Jackson, 1970; interned University of South Alabama, Mobile, one year; general surgery residency, same, 1971-72; urology residency, UMC, Jackson, 1972-75; elected by South Mississippi Medical Society.

SMITH, J. CLINTON, Laurel. Born Brookhaven, MS, Aug. 7, 1939; M.D., Medical College of Wisconsin, Milwaukee, 1966; interned Milwaukee Children's Hospital, Milwaukee, one year; pediatric and pediatric cardiology residency, University of Minnesota, Minneapolis, 1970-73; elected by South Mississippi Medical Society.

SOLOMON, ALEXANDRE, Greenville. Born Paris, France, July 8, 1936; M.D., Vanderbilt University School of Medicine, Nashville, TN, 1959; interned US Naval Hospital, St. Albans, NY, one year; surgery residency, Naval Hospital, Great Lakes, IL, 1964-65; neurosurgery residency, same, 1965-69; elected by Delta Medical Society.

STEADMAN, BEVAN E., Jackson. Born Sherman, TX, Jan. 15, 1943; M.D., University of Texas Medical Branch, Galveston, TX, 1971; interned Maricopa County General Hospital, Phoenix, AZ, one year; psychiatry residency, Mental Health Institute, Cherokee, IA, 1972-74; fellowship in child and adolescent psychiatry, Galveston, TX, 1974-76; elected by Central Medical Society.

VANCE, RALPH BROOKS, Jackson. Born Jackson, MS, Dec. 4, 1945; M.D., University of Mississippi School of Medicine, Jackson, 1972; interned University Hospital, Jackson, one year; internal medicine residency, same, 1974-76; fellowship in Hematology-Oncology, same, 1976-78; elected by Central Medical Society.

WHITES, BARRY L., Jackson. Born Louisville, MS, Jan. 14, 1947; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned UMC, Jackson, one year; internal medicine residency, same, 1974-76; pulmonary diseases residency, same, 1976-78; elected by Central Medical Society.

WILLIAMS, OTHA EDWARD, Greenville. Born Clarksdale, MS, Mar. 18, 1942; M.D., Temple University School of Medicine, Philadelphia, PA, 1973; interned Episcopal Hospital, Philadelphia, one year; surgery residency, same, 1973-77; elected by Delta Medical Society.

FTC Hits Nursing Home Industry

A member of the Federal Trade Commission has said the commission has uncovered a "litany of abuses and of chicanery in the nursing home industry that is too large to ignore," and may propose a crackdown.

"Our preliminary investigation at the FTC revealed instances in which a nursing home was charging drug prices 24 per cent higher than those charged by independent pharmacies," said Elizabeth Dole.

Mrs. Dole told the 1978 Indiana Governor's Conference on Aging that the commission is considering issuing a trade regulation rule for the industry to require, among other things, exact disclosures of prices and services.

1979 Statewide Emergency Medical Care Symposium Set

The 1979 Statewide Symposium on Emergency Medical Services will be held in Jackson at the Coliseum Ramada Inn on Feb. 14-16. The major thrust of the program will center around EMT-Paramedics, poisonings and treatment, and the development of the Statewide Poison Control Center. Continuing education credit for physicians, nurses, and EMT's will be provided.

In addition, the symposium will feature team competition in Basic Life Support knowledge and practical skills i.e., written tests on BLS and demonstration of team CPR skills. Awards will be presented to the winners at the closing session breakfast on Friday, Feb. 16.

Sponsors include the State Board of Health, MSMA, and the Mississippi chapter of the American College of Surgeons (Trauma Committee).

For more information contact Wade N. Spruill, Jr., director, Emergency Medical Services, State Board of Health, P.O. Box 1700, Jackson 39205 (phone 982-6608).

Annual Surgical Forum Is Set for March

The University of Mississippi Medical Center will assemble an international guest faculty for the sixth annual surgical forum Mar. 1-3.

The seminar, which annually attracts hundreds of general surgeons from across the country, is sponsored by the University of Mississippi School of Medicine Department of Surgery and the Medical Center Division of Continuing Health Professional Education.

Course coordinator is Dr. James D. Hardy, UMC professor of surgery and department chairman.

Guest lecturers include the Right Honorable Lord Smith of Marlow (Sir Rodney Smith), president of the Royal Society of Medicine and past president of the Royal College of Surgeons of England; Dr. Edward Beattie, professor of surgery, Memorial Sloan-Kettering Cancer Center, New York; Dr. Arthur J. Donovan, professor and chairman, Department of Surgery, University of South Alabama College of Medicine, Mobile; Dr. Bernard Fisher, professor of surgery, University of Pittsburgh School of Medicine; and Dr. Lucius D. Hill, clinical professor, University of Washington and senior surgeon, the Mason Clinic, Seattle.

Also, Dr. Arlie R. Mansberger, professor and chairman, Department of Surgery, Medical College of Georgia, Augusta; Dr. H. Rawling Pratt-Thomas, professor of Pathology, Medical University of South Carolina, Charleston; Dr. Basil A. Pruitt, Commander and director, U. S. Army Institute of Surgical Research, Brooke Army Medical Center, Fort Sam Houston; Dr. E. R. Woodward, professor and chairman, Department of Surgery, University of Florida College of Medicine, Gainesville; and Dr. Robert M. Zollinger, emeritus professor and chairman, Department of Surgery, the Ohio State University College of Medicine, Columbus.

Sessions will be at the Holiday Inn Downtown in Jackson. Registration fee is \$175.00 and advance registration is required. Enrollment is limited and applications will be accepted and confirmed as received.

The course is acceptable for 1.7 credit hours in Category I for the Physician's Recognition Award.

For more information, contact the Division of Continuing Health Professional Education at the University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

Tenuate®
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychological dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (YS87A)

**Whether overweight is a
complicating factor...
or just uncomplicated overweight.**

Tenuate[®] Dospan[®] ^{IV} **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.
And it's responsible medicine.**

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For prescribing information see opposite page



EMPIRIN[®] COMPOUND c CODEINE

Each tablet contains aspirin, 227 mg; phenacetin, 160 mg; and caffeine, 32 mg, plus codeine phosphate in one of the following strengths: #4—60 mg (gr 1), #3—30 mg (gr 1/2), #2—15 mg (gr 1/4), and #1—7 1/2 mg (gr 1/8). (Warning—may be habit forming)



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MSMA Board of Trustees Conducts Fall Meeting in Jackson

MSMA's Board of Trustees held its regular Fall meeting in Jackson, Dec. 13-14, with all board members and officers in attendance.

The Board reviewed and approved a 1979 association budget totaling \$806,000 to include AMA dues transfers totaling \$300,000. Membership in 1979 has been projected as exceeding 1700 based on a 1978 membership totaling 1685 members, an increase of 56 members over 1977.

In other matters the Board approved plans for an association sponsored "Disabled Physicians' Program" as directed by the House of Delegates at the 1978 annual meeting. The program which is built around outreach, rehabilitation, and re-entry to practice for the chemically dependent physician, is patterned after the highly successful Georgia Medical Association's Disabled Physicians' Program. MSMA's program will begin in January presenting an educational program about its content to the membership, the MSMA Auxiliary and other interested groups.

The association's delegates to the AMA reported on actions taken during the December meeting of the AMA House of Delegates noting in particular that the AMA had reversed its 10 year support for a comprehensive national health insurance program in favor of a milder approach directed at covering the uninsured and providing insurance against catastrophic costs. The AMA Board was instructed to introduce a health insurance bill "only if necessary" and limited to the "milder approach." It was noted that the new AMA position on a health insurance bill was similar to the position taken by MSMA's House of Delegates.

Thomas Yates and Company, administrator of the association sponsored group insurance programs, reported on the status of these several programs noting numerous improvements in benefits which will be announced to the membership next year.

The Board also reviewed the association's 1979 legislative recommendations and approved continuation of the Emergency Medical Care Unit at the

Capitol. Senator Theodore Smith, chairman of the Senate Public Health Committee, met with the Board to present S.B. 2216 which would reorganize the Mississippi State Board of Health and the Board authorized its Executive Committee to hold further discussion with Senator Smith concerning this legislation.

The Board also received a report on the status and operation of home health care agencies in Mississippi and directed that a letter be sent to the membership to explain home health care services and to indicate how abuses of such services should be reported.

The Board heard a report on the public opinion poll on health care in Mississippi presented by the authors of the poll. The Board directed that the report be sent to the association's committee which is studying health needs in Mississippi for further study and action as recommended by the committee.

In other action the Board received reports on the state's voluntary hospital cost containment program, on the status of the Mississippi Medical Fraternal and Educational Society and on certain legal matters before the association. The following Board members and officers attended the December meeting: Robert S. Caldwell, Tupelo, chairman; Arthur A. Derrick, Jr., Durant, vice chairman; Paul H. Moore, Pascagoula, secretary; Ellis M. Moffitt, Jackson; Whitman B. Johnson, Jr., Clarksdale; John R. Lovelace, Batesville; James O. Manning, Jackson; Joe S. Covington, Meridian; W. Boyce White, Laurel; and Sidney O. Graves, Natchez. General officers attending were: Carl G. Evers, Jackson, president; Gerald P. Gable, Hattiesburg, president-elect; James O. Gilmore, Oxford, immediate past president; J. Elmer Nix, Jackson, secretary-treasurer; R. Faser Triplett, Jackson, speaker of the House of Delegates; Walter H. Rose, Indianola, vice speaker of the House of Delegates; Joseph B. Rogers, Gulfport, AMA Delegate; G. Swink Hicks, Natchez, AMA Delegate; and W. Lamar Weems, Jackson, AMA Delegate-elect.

ORGANIZATION / Continued

Family Physicians

Honor Dr. J. E. Powell

The Mississippi Academy of Family Physicians has established a memorial scholarship fund in memory of Dr. John E. Powell, a family practitioner from Houlka who was killed in a farm accident in September 1978.

Dr. Powell grew up in Vardaman and attended Ole Miss, receiving the B.A. degree in 1952. He attended the two-year medical school there and then transferred to the University of Texas Southwestern Medical School at Dallas, graduating in June 1956. He served an internship at Baylor University Hospital in Dallas.

In July 1957 Dr. Powell set up his family practice at Houlka. In 1974 he was certified as a Diplomate of the American Academy of Family Physicians.

Dr. Powell was a member of the Northeast Mississippi Medical Society, the MSMA, the AMA and the Mississippi Academy of Family Physicians of which he served as a director. He was also a participant in the UMC preceptor program and was active in the Family Practice Club. The scholarships will be presented to students at the UMC School of Medicine.

Those wishing to contribute to the memorial fund should contact the Mississippi Academy of Family Physicians, P.O. Box 12330, Jackson, MS 39211.

Physicians Attend Pediatric Pulmonary Conference



The fourth annual LAMAT Pediatric Pulmonary Conference, sponsored by Lung and Thoracic Associations of Louisiana, Arkansas, Mississippi and Alabama was held recently in Little Rock, AR. Mississippi physicians attending included (from left) Dr. Lamar McMillin, Vicksburg; Dr. Achin Kim, Starkville; Dr. Bernard Blumenthal and Dr. Suzanne Miller, both of Jackson. Dr. Miller served as Mississippi's chairman and presented cases on "Chronic Aspiration." The conference provides postgraduate opportunities to specialists in general pediatrics, family practice, pulmonary pediatric practice, internal medicine and radiology and is presented as a Christmas Seal service for "life and breath."

Medical Center Hosts Pituitary Symposium



Dr. Donald P. Becker, professor of neurosurgery at the Medical College of Virginia in Richmond, right, spoke on transphenoidal hypophysectomy during the pituitary symposium at the University of Mississippi Medical Center in November. With him are course coordinators, from left, Dr. Robert A. Sanford, UMC assistant professor of neurosurgery, and Dr. Robert R. Smith, neurosurgery professor.

UMC Establishes Poison Control Center

The resources of the University of Mississippi Medical Center poison control center are now available to physicians throughout the state. Health professionals and the general public may have access to the services by calling 354-7660 during office hours or 968-3500 at night.

According to toxicologist Michael Hughes, coordinator, the system offers a complete range of poison services. "That's how we're different from a poison information center," he said. Its services include poison control and information, analytical toxicology, education and prevention programs, and toxicology research.

Funded by the Department of Health, Education, and Welfare, through the Emergency Medical Services division of the State Board of Health, the center has a full complement of medical and scientific specialists on call for consultation purposes. "Our consultants range from gastroenterologists to entomologists," he said.

The medical director is UMC professor of medicine Dr. John Bower. Dr. Arthur Hume, professor of pharmacology-toxicology, is poison services director.

"We also cooperate with poison control centers in other states if a physician has a patient who may have contacted a toxic substance elsewhere," Hughes

said. "Each center usually has more information on poisons indigenous to its region."

Hughes or another toxicologist are on 24-hour call with ready access to information on 170,000 compounds. The index, printed on microfilm and updated monthly, lists by brand name every product that contains any toxic substance. The information on each product also indicates the amount of the toxic ingredient necessary to induce a reaction and recommends the best treatment. The index identifies poisonous plants, mushrooms and venomous animals native to this area.

In addition to the listings, the center's resources include nearly every journal of toxicology and all the current toxicology texts.

If the call to the center comes from a lay person in need of emergency aid, the center dispatches transportation to the nearest, most appropriate hospital. While the patient is en route, center toxicologists call the physician at the hospital with information on the victim and the toxic element.

Physicians may request analytical studies on a 24 hour basis if they need a toxic substance identified to begin treatment.

Hughes said the center's educational component gets underway Feb. 15-16 in Jackson at a seminar at the Ramada Inn Coliseum for physicians, nurses, emergency medical technicians, and any other interested health professionals. "We're planning workshops for kindergarten teachers and some other

general educational activities aimed at the preschooler. As many as 80 per cent of all accidental poisonings occur in children under five. A successful prevention program aimed at that age group could go a long way toward eliminating the problem," Hughes said.

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PHYSICIAN interested in Pain to manage in-patient and out-patient University Pain Clinic. Full-time university appointment. Eligible for license in Tennessee. Good research potential. Previous pain experience not necessary, will train. Write to: Pain Clinic, 66 N. Pauline, Memphis, TN 38105. The University of Tennessee is an Equal Opportunity Employer.

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IN CONCLUSION

As part of his anti-inflation program, President Carter created a federal regulatory council to monitor agency regulations; to discourage unnecessary inflationary rules and to "assure the consumer is protected with the least adverse inflationary impact." He named the Environmental Protection Agency's Douglas Costle to head the council. U. S. Chamber of Commerce chief economist Jack Carlson commented, "The President turns over review of the mounting burden of federal regulations to the biggest and fastest regulator of them all."

A 1978 California statute requires the State Department of Health Services to establish at least two hospice pilot projects which shall provide Medi-Cal reimbursement. The law defines "hospice" as "a program which provides palliative and supportive care for terminally ill patients and their families, either directly or on a consulting basis, with the patient's physician or a community organization, such as a visiting nurse association." Under the statute, the whole family is considered the unit of care.

A film emphasizing need for improving communication between health care professionals and patients has been released by the health and safety education division of Metropolitan Life Insurance Company. Intended for viewing by professional health care groups, the film, entitled "But, Doctor, You Said...." is available in either 16-mm color film or 3/4 inch videocassette and depicts encounters between patients and health care professionals where misunderstandings develop because of poor verbal communication.

The National Liaison Committee of the American Medical Society on Alcoholism says the alcohol content of nonprescription drugs poses a threat both to alcoholic persons and other users, especially youth, and should therefore be more strictly controlled by the federal government. AMSA has asked the Food and Drug Administration to impose greater controls over the amount of alcohol allowed in such drugs and to require that the alcohol content be identified more prominently on the container labels.

Professional Patient Transportation, Inc. (PPTI) is an air-ambulance service that is based in Miami but operating throughout the continental United States, South America, and the Caribbean. As a large, long distance medical transfer service, PPTI incorporates a network of 100 medically equipped aircraft--many with ICU, CCU and mobile burn units on board, a personnel pool of 2,200 travel-trained nurses from around the nation, a bank of 13 telephone lines--including eight WATS lines, and a full time staff of 12.



For recurrent attacks of urinary tract infection in women

BactrimTM DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older.

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
20	9	1 teasp. (5 ml)	½ tablet
40	18	2 teasp. (10 ml)	1 tablet
60	27	3 teasp. (15 ml)	1½ tablets
80	36	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	½ the usual regimen
Below 15	Use not recommended

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

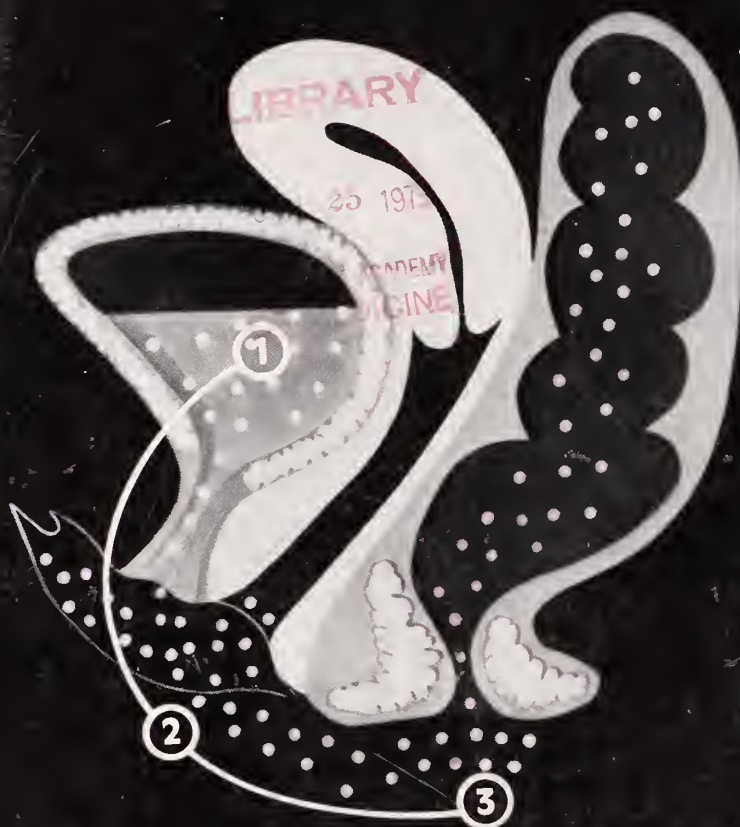
Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



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Please see back cover.

Her next attack of cystitis may require the Bactrim™ 3-system counterattack



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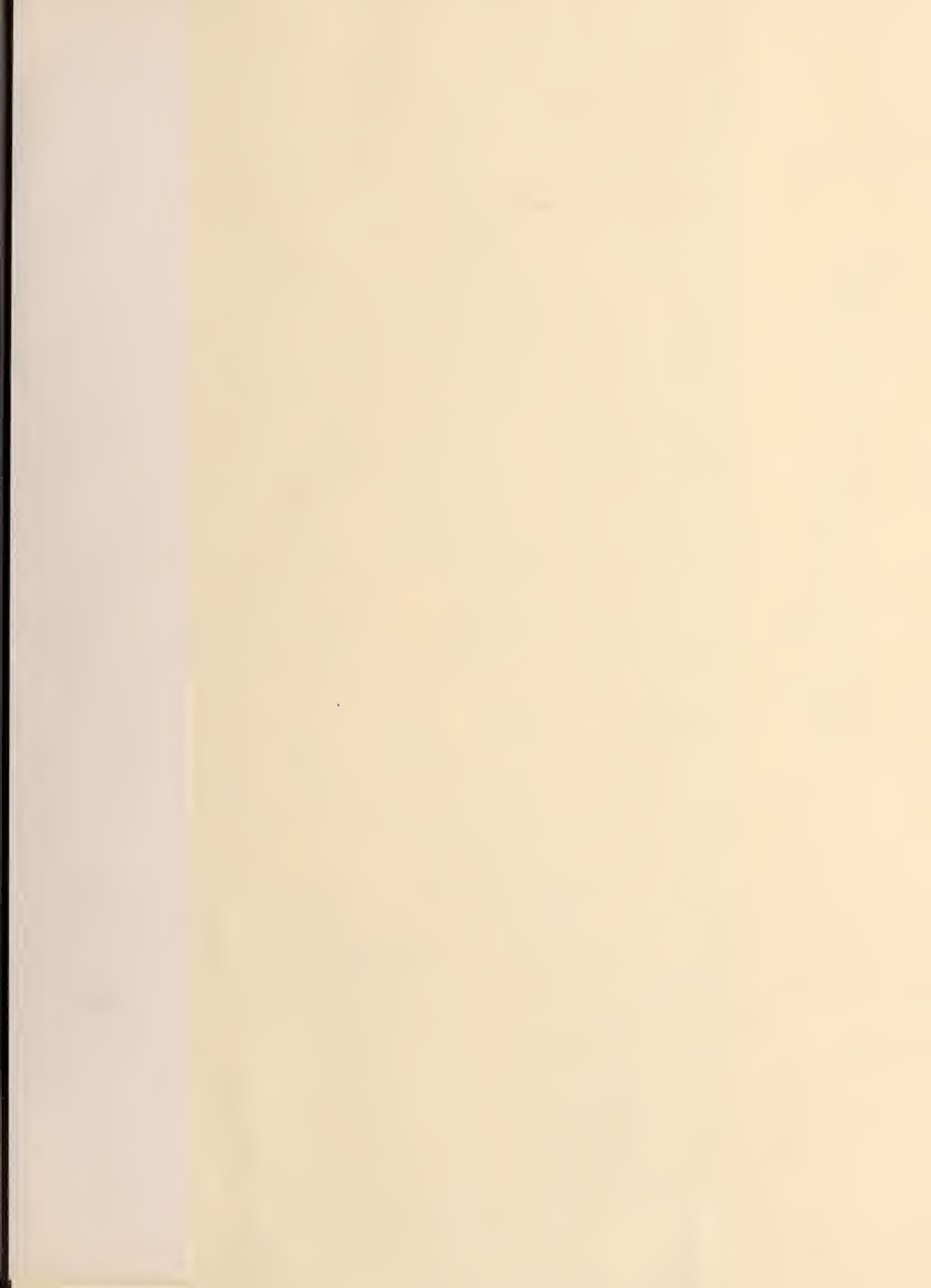
The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has no significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.



February 1979

BALCONY

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(ISSN 0026-6396)

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LIBRIUM® chlordiazepoxide HCl/Roche THE ANXIETY-SPECIFIC

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malforma-

tions as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



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Mississippi's Unique Psychiatric Hospital.

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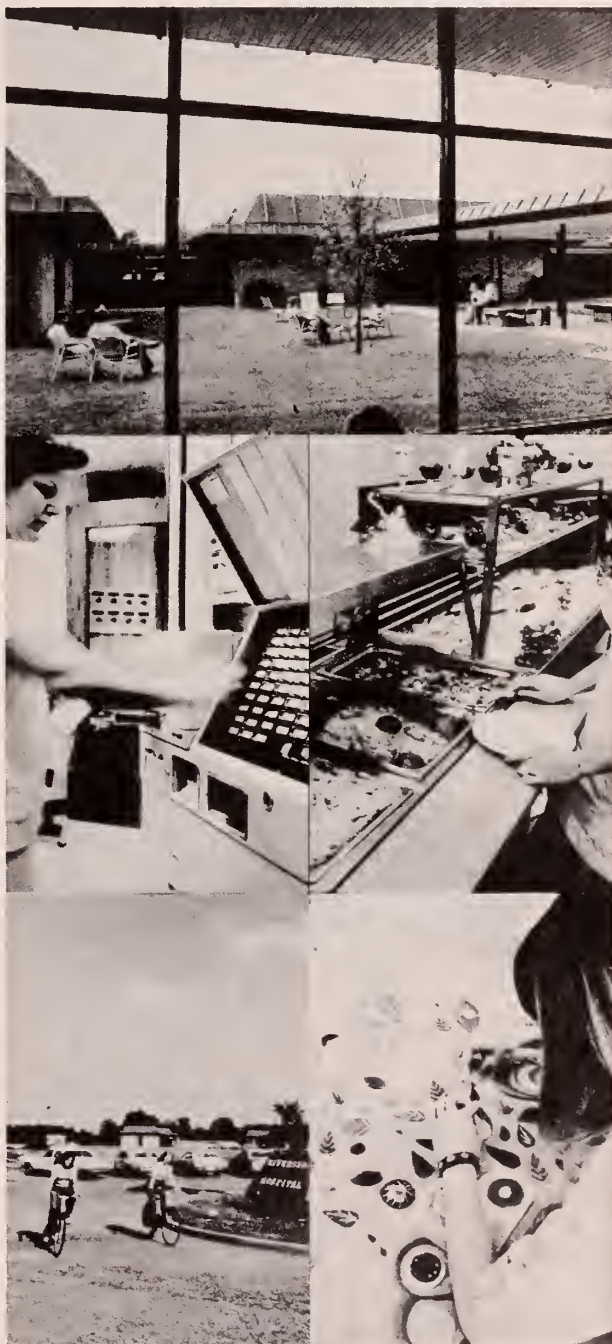
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Riverside is licensed by the Mississippi Commission on Hospital Care, and fully accredited by the Joint Commission on Accreditation of Hospitals.

For additional information contact: John R. Reedy, Executive Director.

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New Orleans Hosts Tri-State Scientific Sessions

The 1979 Physician's Tri-State Scientific Sessions will be held in New Orleans at the Marriott Hotel Mar. 1-3, 1979.

Dr. Quinton Dickerson of Jackson represents the Mississippi Affiliate on the Tri-State Scientific Sessions Committee, a division of the American Heart Associations of Louisiana, Mississippi, and Arkansas.

Theme of the session is "Cardiology '79." Registration fees are \$200.00 for heart association members and \$225.00 for non-members.

Educational credits have been applied for to American Academy of Family Physicians. For more information contact American Heart Association-La., Inc., P. O. Box 19122, New Orleans, LA 70179.

Influenza Immunization Information Is Released

The following excerpt from CDC's Immunization Program was transmitted for physicians' information and guidance by the Mississippi State Board of Health: "Influenza activity has commenced in many areas of the United States. The pattern of influenza seen so far has been similar to that seen with the H1N1 virus last year — primarily affecting children and adolescents. It is still too early to predict whether or not there will be any H3N2 activity this season or whether the H1N1 virus will cause outbreaks in older population groups."

The present situation points up the need to give greatest priority for influenza immunization of high-risk children. Although two doses are necessary to give full protection, there is a good likelihood (in most parts of the country) that immunization commencing immediately will confer protection to high-risk children before they may be exposed. It appears that the quantities of split virus youth formulation vaccine shipped in late November will be adequate to meet any foreseeable need in most areas. Pediatricians and other providers likely to be caring for high-risk children and interest groups composed of high-risk children (cystic fibrosis, juvenile diabetes, kidney disease, etc.) should be informed of the availability of vaccine and the rationale for its use. Additionally, the SBH has vaccine available to high-risk individuals of all ages, both through local health department clinics and through distribution to physicians and other providers.

For hemorrhoids and other anorectal conditions



External hemorrhoids



Internal hemorrhoids



Pruritus ani



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CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg, bismuth subgallate, 2.25%, bismuth resorcin compound, 1.75%, benzyl benzoate, 1.2%, Peruvian balsam, 1.8%, zinc oxide, 11.0%, also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg, bismuth subgallate, 22.5 mg, bismuth resorcin compound, 17.5 mg, benzyl benzoate, 12.0 mg, Peruvian balsam, 18.0 mg, zinc oxide, 110.0 mg, also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani. Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol[®] Suppositories or Ointment.

Contraindications: Anusol-HC[®] Suppositories and Anusol-HC[®] Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants. Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning

and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24), in silver foil strips with Anusol-HC W C printed in block.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01), with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F).

Full information is available on request.



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Each gram contains: Aerosporin[®] (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyoderma (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the

ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

NEWSLETTER

February 1979

Dear Doctor:

Health care costs 52% more in a VA hospital than in a non-federal hospital, according to an American Public Health Association study. For matched cases of three common procedures - transurethral prostatectomies, unilateral inguinal hernias and cholecystectomies - the study found that total costs in VA hospitals averaged \$3,174; in municipal hospitals, \$1,980; and in nongovernmental hospitals, \$2,217. The latter had highest per diem cost but a significantly lower length of stay.

Nursing home costs between 1966 and 1975 rose more than 400 per cent, according to industry figures, and the inflation spiral promises to aggravate this further. The nation's elderly population is expected to double within the next 60 years. Home health care services are being considered by consumers and medical professionals as a less expensive option.

Legislative activities and other socioeconomic programs grab the headlines, but most of the American Medical Association's spending goes for scientific work. During the 1979 fiscal year, 61.5% of the American Medical Association budget will be spent for specific programs providing scientific information, promoting the effective delivery of care, and continuing to improve the quality of care.

Cigarette smoking is increasing in the world's poor nations because tobacco producers present it as a symbol of progress, says a study by Worldwatch Institute, an environmentally oriented research group. "The educational and economic elites of the world's poorer countries are leading their countrymen in taking up the practice," said the report.

Of four new pharmaceutical products which came on the U. S. market during the first quarter of 1978, all had been in use elsewhere; one had been marketed earlier in Japan and several European nations; one was introduced in the United Kingdom in 1973; one has been available in certain European countries for as long as 10 years, and one was first introduced in Sweden in 1974.

The Virginia Council on Health and Medical Care has been congratulated by the AMA on the placement of its one-thousandth physician in Virginia. Since 1950 this non-profit agency has administered a statewide physician referral and placement service in cooperation with AMA and five Virginia medical organizations. The 1,000 physicians serve 221 Virginia communities.

Sincerely,



Nola Gibson
Managing Editor

Pediatricians Want Curbs on Child TV

In a statement issued during its recent Annual Meeting in Chicago the American Academy of Pediatrics called for a ban on television advertising directed at children as "the most effective remedy to end current practices which represent commercial exploitation of children for profit."

At a press conference held to announce the Academy's position, AAP Immediate Past President Saul J. Robinson, M.D., explained that, "Television advertising directed to children is inherently unfair, since children lack the capacity to understand and evaluate the meaning or intent of television commercials." Ideally, Dr. Robinson noted, broadcasters and advertisers would display appropriate responsibility and restraint, and refuse to exploit children through excessive and inappropriate television advertising. But, he added, "Unfortunately, this doesn't seem to be happening."

Chest Physicians Plan TB Course

The American College of Chest Physicians and the Pittsfield Anti-Tuberculosis Association will sponsor the "International Conference on Tuberculosis." This two-and-one-half day postgraduate course will be held at the Royal Plaza Hotel in Orlando, FL, Mar. 22-24, 1979. Conference director is Lee B. Reichman, M.D., M.P.H., associate professor of medicine and director of pulmonary diseases division, College of Medicine and Dentistry of New Jersey Medical School, Newark.

This continuing medical education program will utilize an innovative problem-solving technique involving registrants and faculty. Six case presentations will be featured interfacing each of the content areas to be discussed. The program will also feature lectures on epidemiology, diagnosis, treatment, drug interaction, compliance, skin testing, x-ray, drug reactions, bacteriology, antituberculosis medication and hospital control.

Tuition fees for this educational program are: ACCP members, \$160.00; non-member physicians, \$175.00; residents, nurses, therapists, \$125.00. This postgraduate course has been approved for 15 credit hours in Category 1 of the Physicians' Recognition Award of the American Medical Association.

For further information, contact: Dale E. Braddy, Director of Education, American College of Chest Physicians, 911 Busse Highway, Park Ridge, IL 60068.

Tenuate®

(diethylpropion hydrochloride NF)

Tenuate Dospan®

(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle. The patient should therefore be cautioned accordingly. *Drug Dependence.* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychological dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression, changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy.* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.

Cayey, Puerto Rico 00633

Direct Medical Inquiries to

MERRELL-NATIONAL LABORATORIES

Division of Richardson-Merrell Inc.

Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977

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**Whether overweight is a
complicating factor...
or just uncomplicated overweight.**

Tenuate® Dospan®^{IV} **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.
And it's responsible medicine.**

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For prescribing information see opposite page



The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair, little or no self-care).



Motrin[®] 400 mg TABLETS

ibuprofen, Upjohn

The confidence that comes from experience—
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001

The confidence that comes from experience—
one more reason to prescribe

Motrin 400 mg TABLETS

ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. Aspirin used concomitantly may decrease Motrin blood levels. Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea^{*}, epigastric pain^{*}, heartburn^{*}, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness^{*}, headache, nervousness. **Dermatologic:** Rash^{*} (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence: Unmarked 1% to 3%; *3% to 9%.*

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

How Supplied

Motrin Tablets, 300 mg (white)

Bottles of 60

Bottles of 500

NDC 0009-0733-01

NDC 0009-0733-02

Motrin Tablets, 400 mg (orange)

Bottles of 60

Bottles of 500

Unit-dose package of 100

Unit of Use bottles of 120

NDC 0009-0750-01

NDC 0009-0750-02

NDC 0009-0750-06

NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.

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ALDOMET®
(METHYLDOPA/MSD)

TABLETS: 500 mg, 250 mg, and 125 mg

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SBH Reports Improvements in Public Health

Dr. Alton B. Cobb, State Health Officer of the Mississippi State Board of Health, notes continued advances in public health activities during 1977-78 in the Board's recently issued annual report.

Acknowledging enactment by the legislature of a law requiring immunization of school children as the "most significant public health development of the year," Dr. Cobb stated that "it should now be possible to achieve a goal of 90% immunization of all children 15 years of age and younger by October 1979."

A continued drop in Mississippi's infant mortality rate was also noted by Dr. Cobb as a significant advance in public health. Provisional records for 1977-78 show a drop in the statewide infant mortality rate from 21.6 deaths per 1000 live births in 1976 to 18.0 deaths in 1977.

Dr. Cobb further cited increases in new tuberculosis cases as well as in syphilis and gonorrhea cases as negative developments in public health during the year. The end of the drug portion of the State Board of Health's hypertension program due to a lack of funding was also cited in this regard.

Epilepsy Seminar Is Set for March

The Mississippi Council on Epilepsy's annual Educational Seminar will be held Mar. 10. This year's seminar is titled "Epilepsy and Children" and is offered to all interested individuals from all over the state.

Featured morning speakers will include Drs. Hogan and Ryan from the University Medical Center. Mr. Gus Norwood will present a view of the council's goals and programs.

A luncheon will feature a speaker, the installation of new officers, and the awarding of merit certificates to outstanding citizens within the epilepsy movement.

The afternoon session will feature Mrs. John Arthur, a teacher at Woodland Hills Academy; Judy Barber, a social worker, and a psychologist to address views on social and family adjustment.

Registration fee is ten dollars, which covers the price of the lunch and printed materials. The Holiday Inn North is the site for the conference. Seating room will be limited; therefore, pre-registration is recommended. Further information can be obtained by writing or calling the MS Council on Epilepsy, 969 Lakeland Drive, Jackson, MS 39216; phone 362-2761.

Internal Medicine Seminar Slated for April

A seminar on "Advances in the Therapeutics of Internal Medicine" will be presented April 25-27, 1979, at the Hyatt Regency Hotel in Lexington, KY.

The course is sponsored by the American College of Physicians. For further information contact Frank R. Lemon, M.D., Department of Continuing Education, University of Kentucky College of Medicine, Lexington, KY 40536. Telephone (606) 233-5161.

Obstetricians, Gynecologists Will Convene in May

"Controversies in OB-GYN Care" will be the topic of a course scheduled for May 2-4, 1979, at the Hyatt Regency Hotel in Lexington, KY.

Additional information can be obtained by contacting Frank R. Lemon, M.D., Department of Continuing Education, University of Kentucky College of Medicine, Lexington, KY 40536. Telephone (606) 233-5161.

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DATELINE

Lightning Kills People Each Year Chicago, IL - Some 150 people are killed by lightning in the U. S. each year, and some 300 are injured, says a report in the Dec. 15 Journal of the AMA. Death usually is due to stopping breathing or to heart failure, says the article. The lightning bolt may kill, but it seldom does serious damage to the heart of the survivor. Aggressive cardiopulmonary resuscitation is important as life--threatening effects occur immediately.

Nutrition Education Program Is Started Bethesda, MD - "Foods for Health," a pilot nutrition education research program designed to help consumers make informed choices at the supermarket is being launched by Giant Food, Inc., in cooperation with the National Heart, Lung, and Blood Institute. This year-long pilot program will offer shoppers, at 90 Giant supermarkets in the Washington DC area, the most current information on nutrition, heart research findings, practical shopping tips and food preparation suggestions.

Regulatory Affairs Newsletter Begun Princeton, NJ - Regulatory Affairs/MD, a bimonthly newsletter designed to keep physicians and other health professionals fully informed on FDA-related developments, was introduced this past fall. Publisher is Communications Media for Education, Inc., P. O. Box 712, Princeton Jct., NJ 08550. To ensure complete editorial freedom, the publishers will not accept any advertising, relying solely on subscription income for support. Yearly subscription cost is \$22.50.

St. Louis Bars Can Not Serve Drunks St. Louis, MO - Establishments selling alcoholic beverages in St. Louis County, Mo., have been put on notice by the county prosecutor's office to avoid serving drunk customers. Prosecutor has launched a campaign to bring charges against persons or businesses that have sold liquor to intoxicated persons arrested as a result of a traffic accident. Under Missouri State Statutes, any liquor licensee who serves alcohol to an intoxicated person can be "deemed guilty of a misdemeanor."

Physicians' Earnings Subject to Inflation Miami, FL - Since 1970, the earnings of physicians in the U. S. have not kept pace with the increase in the cost of living, according to a study published by the Law and Economics Center of the University of Miami School of Law. The study presents findings that are at odds with information released this spring by the President's Council on Wage and Price Stability. The Miami study says physician's earnings are subject to many economic factors.

HSA's Save \$1.5 Billion

A national survey of the health planning system in the United States reports that \$1.5 billion in hospital and nursing home capital expenditures is being denied or diverted by health planning agencies each year.

The survey of the nation's health systems agencies is being conducted for the American Health Planning Association, a private group formed in 1971 to promote health planning agencies and their goal of health planning.

Cardiology College Schedules Scientific Session for March

The 28th Annual Scientific Session of the American College of Cardiology will convene in Miami Beach, FL, Mar. 11-15, 1979. Some 7,000 cardiovascular scientists are expected to attend the five-day meeting — with another 6,500 spouses, students, exhibitors and guests swelling total registration to more than 13,500.

Leading off with a dozen mini-courses on Sunday, Mar. 11, the week's schedule includes clinical and

research reports, special lectures, panel discussions, meet-the-expert workshops and symposia. Subject matter will take up every aspect of the cardiovascular sciences, ranging from original investigation to an evaluation of clinical work in both cardiology and cardiac surgery.

Headquarters hotel is the Fontainebleau Hilton, where the Annual Convocation, reception and dinner dance will take place. Technical and scientific exhibits will be on display in the Miami Beach Convention and Exhibit Center.

For further information about the meeting, contact William D. Nelligan, Executive Director, American College of Cardiology, 9111 Old Georgetown Road, Bethesda, MD 20014.

FTC and AMA Clash Again

The Federal Trade Commission has charged the American Medical Association with a "possible conflict of interest" in its affiliation with the Liaison Committee on Continuing Medical Education (LCCME).

The AMA appoints six of the 15-member LCCME which accredits medical schools in the United States. The FTC states that the arrangement permits the AMA to keep new schools from opening, and they claim this restricts the number of physicians.

The latest FTC charge is the third in the last several months. In November 1978 the FTC charged the AMA with restraining trade by regulating doctor advertising. Earlier in the year the FTC investigated charges of doctor control of Blue Shield insurance boards.

JCAH Establishes ER Accreditation

The Joint Commission on Accreditation of Hospitals has issued guidelines for accreditation of hospital emergency rooms.

Starting this year, hospitals will have to meet requirements outlined in the Emergency Services section of the 1979 JCAH accreditation manual in order to receive approval.

The new section outlines four levels of emergency room service. Level I emergency rooms provide the most complex and comprehensive services. Level IV services will be the simplest and least complex.

At the recent December meeting of the AMA House of Delegates, the association's Board of Trustees reported that the four-level categorization was, in their opinion, "appropriate" for hospitals.

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This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. Dyazide interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964

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INDICATIONS

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Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FOA has classified the following indications as "probably" effective.

May also be useful in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, acute enterocolitis, and functional gastrointestinal disorders), and in neurogenic bowel disturbances (including the splenic flexure syndrome and neurogenic colon).

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy), obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis, myasthenia gravis. **WARNINGS** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with autonomic neuropathy, hepatic or renal disease, ulcerative colitis—Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon, hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension, hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention, blurred vision and tachycardia, palpitations, mydriasis, cycloplegia, increased ocular tension, loss of taste, headache, nervousness, drowsiness, weakness, dizziness, insomnia, nausea, vomiting, impotence, suppression of lactation, constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis, urticaria and other dermal manifestations, some degree of mental confusion and/or excitement, especially in elderly persons, and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION** Dosage must be adjusted to individual patient's needs.

Usual Dosage Bentyl 10 mg capsule and syrup Adults: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. Children: 1 capsule or teaspoonful syrup three or four times daily. Infants: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg Adults: 1 tablet three or four times daily. Bentyl Injection Adults: 2 ml (20 mg) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanechol chloride USP) should be used.

Product Information as of October, 1976

UT Schedules Reproductive Medicine Course at Memphis

The University of Tennessee Center for the Health Sciences College of Medicine will present the Fourth Annual Reproductive Medicine Symposium on Use of Sex Steroids in Clinical Practice to be held at the Holiday Inn: Rivermont in Memphis May 7-9, 1979.

The course is approved for 20 cognate hours ACOG, 25 AAFP prescribed hours, 25 Category I Physician's Recognition Award AMA.

For further information contact: Division of Continuing Education, University of Tennessee Center for the Health Sciences, 800 Madison Avenue, Memphis, TN 38163. Telephone (901) 528-5547. James R. Givens, M.D., is symposium director.

Medicaid Commission Changes Payment Policy

The Mississippi Medicaid Commission has established a new policy requiring all Medicaid participating providers to submit claims within six months from the beginning date of service.

The effective date of this new policy is Jan. 1, 1979. Medicaid participating providers will have until July 1, 1979 to submit all old claims. On and after July 1, all Medicaid claims must be submitted within six months from the beginning date of service. Medicare crossover claims will be paid according to Medicare program policy.

Medicaid Issues Fiscal Year 1978 Report

The Mississippi Medicaid Commission reports expenditures of \$181,028,195 during fiscal year 1977-78 with 5,934,184 claims paid on behalf of 285,625 Medicaid recipients.

A total of 343,295 Mississippians were eligible for Medicaid during the year and of this number 88,387 were aged, 1,799 were blind, 32,295 were disabled, 169,182 were AFDC children and 50,392 were AFDC adults. Holmes County had the highest percentage of population on Medicaid — 35.2%. Jackson County had the lowest — 2.7%.

Hospital and nursing homes received the bulk of Medicaid payments during the year. Hospitals received \$48,482,615 or some 25.2% of the total payments. Nursing homes received \$50,158,723 or some 29.2% of total payments.

During the year 1977 Mississippi physicians received Medicaid payments totaling \$16,457,626 or some 9.6% of total payments.

Medicaid expenditures in 1978 increased 28.3% over expenditures in 1977.

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ORIGINAL PAPERS

Cardiac Rehabilitation

JOHN D. WOFFORD, M.D., EMILY WOOFFORD, B.A.,
G. F. BEISSEL, Ph.D., and JANET BRUMFIELD, R.P.T.
Jackson, Mississippi

EXERCISE AND ITS relation to cardiovascular fitness has been a subject of increasing popularity in recent years. Numerous studies show substantially improved levels of fitness in persons participating in a program of regular physical training. Physical training of patients with cardiovascular disease is an aspect of the exercise upsurge which offers great potential for improving the lives of these patients, both physically and psychologically. There is evidence that early onset, severity, and death from coronary heart disease may be delayed or lessened by long-term, controlled physical activity.¹

Past modes of treating coronary artery disease have proved less successful than early enthusiasts might have expected. An alternative approach to dealing with the vast majority of coronary disease victims is warranted. Although cardiac rehabilitation is a fairly new concept, the preliminary results are so impressive that it is rapidly becoming a popular method of dealing with cardiovascular disease across the country. The report of the Task Force on Cardiovascular Rehabilitation of the National Heart and Lung Institute said of cardiac rehabilitation that "such training of coronary patients is a plausible alternative and palliative approach to ischemic heart disease with appreciable clinical, psychological, physiological, and pathological justification."^{3, 4} The purpose of this paper is to discuss the concepts of cardiac rehabilitation presented by various investigators and to report the earliest results of the newly

established cardiac rehabilitation program at the Mississippi Methodist Hospital and Rehabilitation Center.

This paper outlines the changing role and value of cardiac rehabilitation and describes the outpatient program at the Mississippi Methodist Hospital and Rehabilitation Center which began in 1978. The authors defined cardiac fitness, explained measurements of cardiac fitness, and discussed exercise physiology, the conditioning benefits of exercise and the value of patient education.

Several earlier reports have shown excellent results from conditioning disabled cardiovascular patients with a supervised team approach. Thornley and Turner showed that of 105 post-myocardial infarction patients who had completed a cardiac rehabilitation program and who were eligible for work, 46 per cent returned to work within 12 weeks and 86 per cent returned within 24 weeks, 90 per cent of whom returned to their former employment.⁵ Another study done by Henderson et al showed 24 of 27 patients returned to full employment after completing a three month training program of rehabilitation.⁶ Improvements seen in these patients were an increase in the work classification from light to medium, a decrease in heart rate at work, and a decrease in the rate-pressure product, indicating a decrease in myocardial oxygen requirement. Rechnitzer, in a five year follow-up of two groups of

From the divisions of Cardiopulmonary Services and Cardiac Rehabilitation Service, Methodist Hospital and Rehabilitation Center, Jackson, MS.

post-myocardial infarction patients, compared a group of exercised subjects with non-exercisers.⁷ The exercisers had a 1.3 per cent recurrence rate and a 3.9 per cent death rate while the control group had a 27.9 per cent recurrence rate and an 11.8 per cent death rate. Wenger reports that of 125 patients who completed the outpatient phase of cardiac rehabilitation after having suffered myocardial infarction all were completely without incidence during or immediately following the cardiac conditioning exercises.⁸

Cardiac fitness can be defined objectively on the basis of maximum oxygen consumption ($\text{VO}_2 \text{ Max}$), which is attained when further increments in work rate do not significantly increase the rate of oxygen uptake.^{9, 10} The $\text{VO}_2 \text{ Max}$ is divided by body weight and expressed in units of measurement called METs. One MET (Metabolic Equivalent) is the energy requirement at complete rest while the patient is awake and sitting. The term MET signifies the multiples of resting metabolic energy used during a given activity. Resting oxygen consumption is approximately 3.5 to 4.0 ml per minute of oxygen for each kilogram of body weight. One MET is usually considered to be 3.5 ml per minute per kilogram.^{1, 9, 11} Much work has been done to devise a method of assessing patients both pragmatically and scientifically. Although indirect measurements are not without criticism, they are used satisfactorily for the evaluation of a patient for cardiac rehabilitation.¹² An indirect measurement can be made of the heart's oxygen requirement by measuring the heart rate and systolic blood pressure to arrive at a rate-pressure product. This is referred to as RPP or the double product. The clinical value of this product as an index of myocardial oxygen consumption is suggested by the fact that patients with angina pectoris frequently have a constant RPP at which pain first appears.¹³ This is referred to as the ischemic threshold. Physical conditioning causes numerous physiological changes in the cardiovascular system. The changes which accrue during exercise include an increase in cardiac output and a decrease in peripheral resistance in the active muscles accompanied by an increase in venous return. The limiting factors of whole body exercise are the ability of the heart to increase the stroke volume and the amount of oxygen delivered to the muscle mitochondria for metabolism.^{1-16, 29}

The mechanical efficiency of the heart is usually around 18 per cent of its capabilities but improves with progressive activity by utilizing cardiovascular

reserves. The improvement with long-term exercise performances causes a reduction in heart rate and arterial blood pressure. At sub-maximal levels of exercise lower heart rate and arterial blood pressures result in reduction in the rate-pressure product and of myocardial oxygen requirements. Following endurance physical training the reduction of heart rate is seen both at rest and at various levels of sub-maximal exertion. The mechanisms producing this "training bradycardia" are not defined but appear to be a reliable indicator of desirable cardiovascular adaptation.^{1, 4, 14, 15, 17}

The preceding discussion indicates favorable cardiovascular changes observed after training of the normal heart. The diseased heart does not respond to exercise stimuli with the same efficacy as the healthy heart. Even for patients with impaired heart function who undergo a period of physical training suited to their particular needs, there ensues an improved cardiovascular condition. Detry et al report that the major hemodynamic findings after physical training in patients with coronary heart disease is a decreased cardiac output at rest. Sub-maximal exercise produces an increased arterial venous oxygen difference, an unchanged stroke volume, lower heart rate, and lower blood pressure. Consequently, there is a lower rate-pressure product.¹⁷

Since a lower resting and sub-maximal heart rate is observed in most hearts after physical conditioning, there must be a compensatory increase in stroke volume and/or arterial venous oxygen difference to balance the decreased heart rate. Unlike healthy subjects, patients with coronary heart disease compensate their lower post-training heart rate by increased arterial venous oxygen differences rather than an increased stroke volume.¹¹ A higher arterial oxygen content with no observable change in mixed venous oxygen content has been observed in coronary heart disease patients after physical training.

Fox studied the response of patients with angina pectoris to physical training. He contends that the bradycardia and reduced blood pressure may be the major contributors to the marked increase tolerance and capacity for exertion after physical training in patients with angina.¹ Redwood reports a marked increase in exercise capacity in angina patients after training. He found a rise in the time of onset of angina and in the intensity of exercise attained before the onset occurs.¹⁶ His findings indicate that the decreased myocardial oxygen consumption seen at any level of exercise accounts in part for the improved exercise capacity.

The type exercise utilized in cardiac rehabilitation programs must bring about the desired results. Static

or isometric exercise causes an increase in systemic vascular resistance while the cardiac output does not significantly increase. Therefore, calisthenics and isometric exercises are of little value in rehabilitating cardiac patients. The desirable exercise is aerobic or isotonic.^{11, 13} The heart patient who is being rehabilitated must always be placed in a condition in which demands are met easily and efficiently. This usually is at a level of mild to moderate exercise of 2.5 to 7.5 METs.¹⁸

The concept of the whole body exercise program is important. Fardy has indicated that variations in the physiology of arm and leg exercises are necessary in rehabilitation.¹⁸ He found angina occurring at a lower level of exertion in arm exercises than in leg exercise.

Purposes and Goals

The purposes and goals of a comprehensive cardiac rehabilitation program include regular exercise and educating the patient in risk factors. The program must encompass obesity, smoking, hypercholesterolemia, anxiety, fear, and depression to fully rehabilitate the patient. Since the extensiveness of cardiac rehabilitation is multi-factorial, an adequate job of rehabilitation is often beyond the realm of the patient's private physician. Many physicians do not have the time or training to counsel patients regarding diet, physical exercise and the psychology of relaxation. A team approach to cardiac rehabilitation is an alternative approach for the patient's benefit.

The rehabilitation team must strive for maximum cardiac function with minimal risk to the patient. Rehabilitative efforts can benefit even the so-called high risk group as well as patients with severe heart disease.^{1, 11, 19, 20} Oberman and Koushokus state that the principles of a rehabilitation program for post-surgical aortocoronary bypass patients are similar to those for patients after a myocardial infarction.²¹ Naso indicates the importance of cardiac rehabilitation for those patients whose disabilities encompass more than just cardiovascular disease since they require an increased oxygen supply from the heart.²² Kennedy et al followed angina patients in a one year graduate exercise program to report "all had a decrease in angina, an increase in self-esteem, and a more positive attitude toward their work and their disability."²⁵

Three concepts must be employed for a program to successfully rehabilitate the cardiac disease victim. The rehabilitation needs to be early in the course of recovery. A prolonged period of 6 to 12 weeks of inactivity in the post-infarct period has deleterious

cardiac and general physical effects. It also has the more obvious undesirable occupational and emotional effects.^{5, 20} Mullins suggests that an early start at rehabilitation can not only improve the patient's condition but also cut health care costs by allowing quicker hospital discharge.²⁴ Moss indicates that a well-directed secondary prevention program is effective in reducing cardiac mortality in the early post-hospital phase of myocardial infarction.²⁵

Long-Term Physical Activity

Emphasis must be placed on long-term physical activity rather than the results of fitness testing. Rehabilitation is a slow process which can only be accomplished by repeated sessions of sub-maximal exercise concomitant with patient education. Ehsani et al report that even trained athletes can experience the effects of deconditioning after only four days of inactivity.²⁷ It is important not only that the intensity of exercise in a rehabilitation program be carefully maintained, but also the frequency of sessions be prescribed and followed. Since cardiac rehabilitation attempts to alter the lifestyle of the disabled, the ultimate success of the program can only be determined after long periods of time. Patient follow-up is fundamental to the rehabilitation process.¹⁹ Follow-up indicates how well a patient is adhering to the program principles following completion of the program. It also gives the team an opportunity to offer additional help to a patient and to reinforce his rehabilitative spirit.

The Mississippi Methodist Hospital and Rehabilitation Center began an outpatient, all inclusive cardiac rehabilitation program in January 1978. The program is an outpatient service with a duration of approximately eight weeks. The sessions are held three times weekly. One hour of each session is specified for patient education, the other hour for closely supervised exercise.

The cardiac rehabilitation team includes a physician, nurse, clinical psychologist, physical therapist, cardiopulmonary technician, nutritionist, vocational rehabilitation counselor, and the services of the hospital chaplain and social service. Combining efforts, the team attempts to educate the patient and his family about the risk factors associated with heart disease. Target areas include the disease process itself, nutrition, aspects of physical conditioning, smoking, alcohol consumption, anxiety, depression, and stress. The vocational rehabilitation counselor provides guidance relative to the occupational work and financial assistance when applicable.

Several categories of patients have benefitted

CARDIAC REHABILITATION / Wofford et al

from the cardiac rehabilitation program. Post-myocardial infarction patients may begin the program as early as four to six weeks after the insult in uncomplicated cases. In more complicated cases the team physician and the referring physician jointly make the decision of when to start the patient in the program. The post-operative patient is also eligible for cardiac rehabilitation. The judgment of the referring physician determines the starting date which is generally three to six weeks following aortocoronary bypass and valvular procedures. High risk patients also indicate a need for cardiac rehabilitation. These include anginal patients who cannot benefit from surgical intervention and patients with significant family history, marked obesity, hypertension, diabetes, or markedly elevated blood lipids.

Upon entrance into the program a comprehensive initial evaluation is compiled which includes a history and physical as well as other standard and acceptable procedures. At the conclusion of the program, the patient is given a multi-phased stress test and is also given an exercise prescription for his individual needs. The physical therapist performs a home visit on each patient utilizing a portable telemetry unit complete with an EKG oscilloscope and heart rate indicator for monitoring. This is an invaluable assessment tool as it allows the therapist to evaluate the effects of exercise in the home or work setting. While still in the patient's home, the physical therapist monitors the patient as he performs activities of daily living and offers suggestions concerning energy conservation techniques so important in the cardiac patient. After the patient is discharged from the program he is brought back for a follow-up evaluation in three weeks and then every three months thereafter for one year.

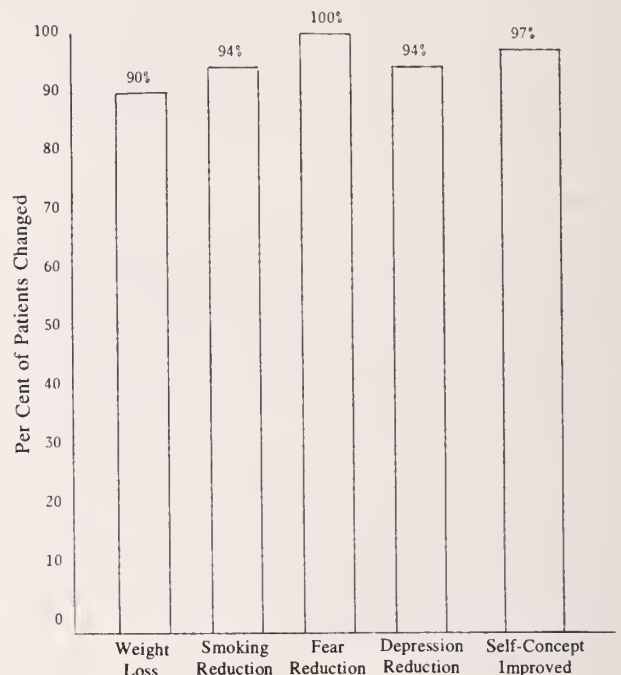
As of Nov. 1, 1978, 37 outpatients completed the cardiac rehabilitation program. Each patient was assessed with pretest, posttest, and follow-up behavioral measures in the areas of weight, smoking, fear, depression, and self-concept. Data were compiled on each patient and collectively for each respective variable.

In the area of weight loss, data indicated that of those patients needing to lose weight, 90 per cent successfully lost weight. The average weight loss per patient was 8.6 pounds. This loss was maintained three months later. Two of the three unsuccessful patients lost 15 and 4 pounds respectively during the program. The loss, however, was not maintained at the time of follow-up.

Data on smoking showed that 94 per cent of the

patients were able to decrease cigarette consumption. The average reduction per patient was 26.3 cigarettes per day. Sixty per cent of the patients quit completely and were maintaining same at time of follow-up. Only two patients failed to reduce their smoking. Both verbalized intentions of not wanting to change this behavior.

TABLE I
BEHAVIORAL CHANGES IN CARDIAC REHABILITATION



In the area of fear, data indicated that 100 per cent of the patients were successful in reducing this behavior. The average numerical decrease per patient as measured on the Wolpe-Lang Fear Survey Schedule was 28.6. This significant finding was even more remarkable when considering the fact that 20 per cent of the patients were judged normal i.e., average in fear behavior at time of admission to the program. Results indicated these patients also showed a marked decrease in fear behavior of 10.4 points per patient.

Findings on depression showed that 94 per cent of the patients were able to reduce this behavior. The average numerical decrease per patient was 9.3 as measured on the Zung Depression Scale. Both patients who failed to show a reduction in depression scored in the normal, nonpsychopathology range at time of admission to the program.

In the area of self-concept, data indicated that 97 per cent of the patients successfully improved their

self-image. Feelings of worth, confidence, usefulness, and outlook on life improved positively. These changes were sustained at time of follow-up. The one patient who did not improve his self-concept rated excellent on all measures at time of admission to the program. As a result, there were no deficit areas needing improving.

Compliance to both the program in general and specifically the exercise prescription has been excellent. Of the 59 patients who have enrolled in the cardiac rehabilitation program, 37 have completed the 24 sessions, 18 are currently enrolled, and the remaining 4 dropped out giving a compliance rate of 93 per cent. Further analysis of the 4 patients who dropped out shows that 1 was transferred out of the country, 1 dropped out on the 23rd session due to financial and scheduling problems, and the other 2 dropped out after 5 and 20 sessions due to lack of interest in the program.

Twenty-one patients have been followed for a period of 3 months or more since the time of discharge from the program. Of those 21, 95 per cent have complied to their exercise prescriptions with the sole exception attributed to one patient's fracturing his arm, thereby preventing full compliance to his exercise prescription.

When the 37 patients began the program, the estimated level of their activity was approximately 1.5 to 2.5 METs. At completion of the eight weeks of controlled exercise, 94 per cent of the patients were functioning at or above the 9.0 MET level. Many exceeded the 12.0 MET level. The two patients who failed to achieve the 9.0 MET level were incapacitated with neuromuscular disease and had other complications which prevented them from participating at a 100 per cent involvement rate.

In light of these behavioral findings, a multifaceted cardiac rehabilitation team program appears to be a logical, feasible, and successful addition in the treatment of coronary artery disease.

Summary

The purpose of this paper was to outline the changing role and value of cardiac rehabilitation. Cardiac fitness was defined objectively; both direct and indirect measurements of cardiac fitness were explained. Discussions of exercise physiology, the conditioning benefits of exercise, and the value of the patient's education in the risk factors of coronary artery disease were given. The outpatient program at the Mississippi Methodist Hospital and Rehabilitation Center began in January 1978, and consisted of a one hour exercise session and a one hour education session meeting three times per week for approxi-

mately two months. The cardiac program utilized a multidisciplinary team approach to rehabilitation. Topics discussed in the group education hours included individual sessions on each of the risk factors of coronary artery disease. The categories of patients who received benefits from the program included those post-myocardial infarction, post-coronary artery bypass surgery, and those individuals considered high risk for coronary artery disease. Initial findings in the 37 patients who have completed the program showed weight reduction in 90 per cent, smoking reduction in 94 per cent, reduced fear in 100 per cent, reduced depression in 94 per cent, improved self-concept in 97 per cent, and average increase in physical activity level from 2-10 METs.

★★★

P.O. Box 4878 (39216)

The Cardiac Rehabilitation Service was funded by an establishment grant from the Division of Vocational Rehabilitation, Department of Education, State of Mississippi.

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Journal MSMA policy limits references published to 10. For a complete bibliography, write to the authors.

Radiologic Seminar CLXXXVIII: Technical Variation on Carotid Arteriography

ALLEN R. YATES, M.D.

Jackson, Mississippi

INCREASING DEMAND for angiographic investigation of carotid vascular disease prompts a filming routine which yields a diagnostically superior demonstration as simply, easily, and efficiently as possible. At our institution the following technique is accepted as very satisfactory in all regards, and is recommended for general consideration. Contrast injection is exclusively via catheter technique primarily from the femoral route with an occasional axillary approach. Biplane filming with Schonander cut-film changers is used for the intracranial series.

Following catheter positioning in one common carotid artery, complete arterial and venous phase intracranial film series are obtained in standard frontal and lateral projections with full visualization of the neck in the lateral view as in figure #1. A 10 x 12 film cassette with a 12-1 focussed grid combination is then placed on top of the AP changer, oriented transverse to the neck. The AP overhead tube with extension cone is then aligned off-center to one side of the grid cassette combination. With the head rotated to one extreme oblique, a "spot" film centered over the carotid bifurcation is obtained during contrast injection. The overhead tube is then shifted to the other side of the cassette, and the patient is repositioned for a second "spot" of the carotid bifurcation in the opposite oblique. Both exposures are on the same film as shown in figure #2. Cronex-4 film with DuPont HiPlus screens using a

small focal spot provides good detail. The sequence is repeated for the contralateral carotid. The left



Figure 1. Standard lateral projection with the neck well shown.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Mississippi Baptist Medical Center, Jackson, MS.



Figure 2. Oblique carotid "spots" with good demonstration of the bifurcation.

subclavian and right subclavian or innominate arteries are then "spotted" as in figure #3, but in this case the overhead cone is removed and only the tube collimator is used.

This procedure provides excellent demonstration of the carotid neck vessels in three views, good demonstration of the subclavian arteries and vertebral vessels in the neck, and a diagnostically complete intracranial carotid study. Arch aortography and its necessary subtraction is not performed unless there is suspicion of compromise of the origins or proximal trunks of the major vessels at catheterization. Of course there is no hesitation to do an arch study if there is any question in this regard, but the carotid bifurcations in the neck are much better



Figure 3. Left subclavian "spot."

visualized with the "spot" obliques. The importance of full arterial and venous phase filming of the intracranial carotid series in both projections should be emphasized to avoid missing other intracranial pathology which may coexist with or mimic the symptoms of neck vessel disease. Vertebral injections are performed when indicated. ★★★

1225 North State Street (39201)

"Breathing Easy," a new manual for patients with chronic obstructive pulmonary disease, is available as a Christmas Seal service from the Mississippi Lung Association, P.O. Box 9865, Jackson, MS 39206. The 32-page booklet is designed to provide patients information on emphysema and chronic bronchitis and provides physicians with an excellent tool for instructing patients about their condition.

Special Article

(Editor's Note: The following article, third of a three-part series concerning health planning in Mississippi, is reprinted with permission of The Sun-Herald, Biloxi-Gulfport, published Oct. 15, 1978.)

Finch: One Agency Is Best for People

By EDITH BIERHORST BACK
Sun-Herald Staff Writer

Gov. Cliff Finch, through his press officer, was presented with written questions to enable him to respond to the main issues raised about the health planning system in Mississippi.

Replying to respondents' statements that Finch promoted a single HSA for the state by adding new members to the committee to change its vote, the Governor's written statement said:

"It must be pointed out here and made extremely clear that Secretary of Health, Education and Welfare Joseph Califano awarded full designation to the one HSA concept for Mississippi. Further, the previous administration advocated one HSA and, in addition, I have sought input from top officials in the health profession, including Atlanta HEW Regional Health Officer, Dr. George A. Reich, and Washington HEW official, Dr. Ed Martin.

No Political Reasons

"I do not believe that Dr. (Howard) Clark ever stated that I wanted a single HSA for political reasons, when it must be considered that the law designation had to represent the best interest of all parties concerned, including health providers and health recipients."

Of allegations that the HSA is a failure because all certificate of need decisions are in the hands of the governor, Finch replied:

"The reporter asking this question needs to do her homework. The HSA is not affected by the appointment to the SHCC, administrative positions in the Mississippi Health Planning and Development Agency, nor fair hearing officers. You must be aware that the HSA is a private, non-profit corporation with its governing board consisting of 34 members, 27 of which are elected and only 7 of which I appoint.

Insinuation Is Unfounded

"In addition, the sub-area councils of the HSA are also elected in public elections and nominations are

made on the floor under the rules of parliamentary procedures. Insofar as your insinuation that HSA is a failure, I find that totally unfounded and quite the opposite. Because of the great difference in cooperation between the HSA and the State Health Planning and Development Agency, Mississippi today possesses the greatest opportunity ever for a total statewide system of health delivery, including rural health initiative and physician recruitment programs."

Asked to comment on testimony of the HEW Under Secretary before the Senate Committee, that HEW was required to give full reimbursement to three unneeded nursing homes in Mississippi because the fair hearing officer intentionally allowed the review period to expire, the governor wrote:

"I am not aware of any such statement made by Under Secretary Hale Champion. Therefore, I do not believe he said this in the vein you intended. In regard to the three nursing homes mentioned in your question, I had no knowledge of their existence, and I reference you to the State Medical Facilities Plan.

"In regard to the overruling of original decisions by fair hearing officers, your implication is completely unfounded. The role of the fair hearing officer parallels that of a judge and no one, including the governor, tells a judge what to do.

"Finally, I have no knowledge or cannot find anyone who is aware of the Atlanta HEW office ever requesting the removal of fair hearing officers in Mississippi."

Gov. Finch added the following to his response:

"In summary: When I assumed the office of governor, it had already been determined by the leaders of the previous administration that a single statewide health planning agency was in the best interest of the people of Mississippi. This concept also had the approval of the appropriate federal officials. After a careful and lengthy study and review of the options, I agreed with their findings that a single agency was indeed the best approach. Subsequently, there were some people who were bitterly disappointed because they were not able to wrest control of the agency and have been extremely critical of what I know to be an excellent record by HSA. There are some who want to break up the effectiveness of the statewide HSA by dividing the state into several HSAs in order to gain control at the regional level."

A final question submitted to the governor dealt with reports that nursing home interests have controlled the health planning review process since Finch removed the influence of physician and hospital interests. The governor did not include a reply to this question in his response.

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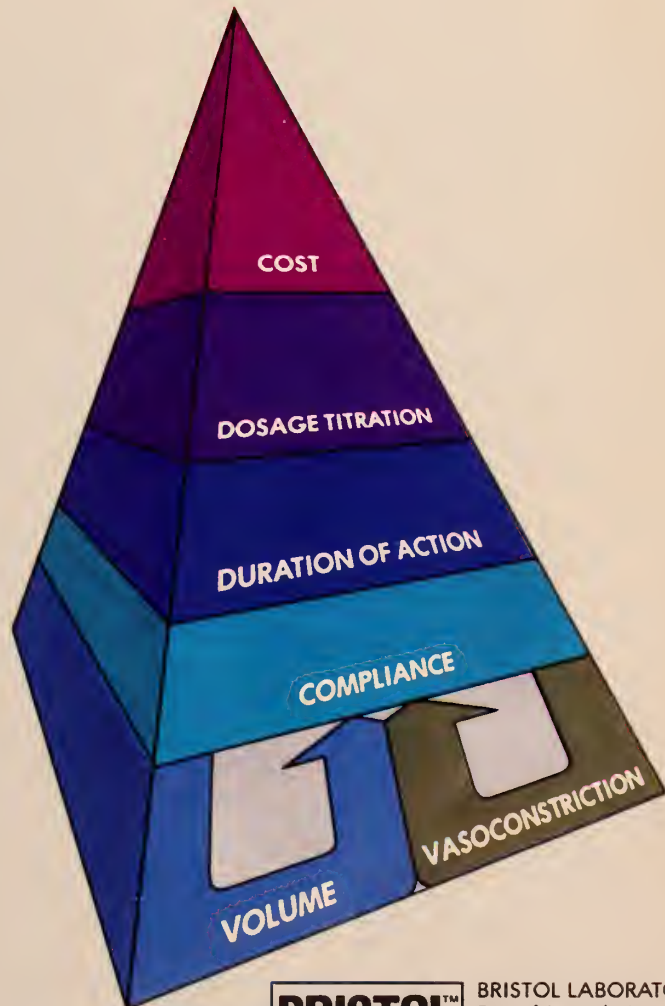
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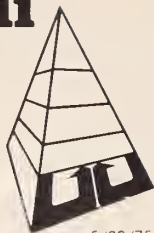
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CONTRAINDICATIONS: Patients with anuria, oliguria, or hypersensitivity to this or other sulfonamide derived drugs.

WARNINGS: Saluron should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Thiazides may be additive or potentiative of the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in pregnancy: Usage of thiazides in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing mothers: Thiazides cross the placental barrier and appear in cord blood and breast milk.

PRECAUTIONS: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except, under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased or unchanged. Latent diabetes mellitus may become manifested during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS:

A. Gastrointestinal system reactions: Anorexia, gastric irritation, nausea,

vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis.

B. Central nervous system reactions: Dizziness, vertigo, paresthesias, headache, xanthopsia.

C. Hematologic reactions: Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

D. Dermatologic-Hypersensitivity reactions: Purpura, photosensitivity, rash, urticaria, necrotizing angitis (vasculitis) (cutaneous vasculitis).

E. Cardiovascular reaction: Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates, or narcotics.

F. Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

USUAL DOSE: The average adult diuretic dose is 25 to 200 mg. per day.

The average adult antihypertensive dose is 50 to 100 mg. per day.

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

HOW SUPPLIED: Saluron (hydroflumethiazide 50 mg.): Bottles of 100.

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This fixed combination drug is not indicated for initial therapy of hypertension. Hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension is not static, but must be reevaluated as conditions in each patient warrant.

CONTRAINDICATIONS: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

WARNINGS: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients.

Use in pregnancy: Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fetal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

PRECAUTIONS: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss may cause digitalis intoxication. Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or bronchial asthma and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being pre-diabetic should be kept under close observation if treated with this agent.

ADVERSE REACTIONS: Hydroflumethiazide: Skin-rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. **Reserpine:** Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares.

USUAL DOSE: 1 tablet b.i.d.

HOW SUPPLIED: Salutensin (hydroflumethiazide 50 mg., reserpine 0.125 mg.): Bottles of 100 and 1000.

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There is a great need for the medical profession to continue to maintain the highest standards of medical practice, education, and research. Your membership in organized medicine can help determine the course of health care in the future.

If you are a member, your continued support is needed. If you are a member, is your spouse a member of the county, state, and national Auxiliary? She is needed in Auxiliary to support the aims and objectives of this vital organization. If you are a member, did you send in her (his) dues along with yours? They are all of three dollars State, seven dollars National. A very small amount for the returns. If you are not a member, will you consider joining? Your spouse may be waiting for the opportunity to belong and serve on your behalf. The Auxiliary is a powerful and unique group, working for the better health care for all people. It DOES MAKE A DIFFERENCE whether we belong or not. We belong to a group that projects a positive image of physicians at a time when they are being portrayed as a self-serving profession. We have an opportunity to be a part of the force that "makes the difference" at legislative sessions. We are kept informed of all legislative action and what we can do to insure the availability of top quality health care. Leadership training and developmental programs are invaluable. Facets, Distaff, and Directline Newsletter keep us informed and in touch with community, county, state, and national involvement. These are but a few of the benefits of belonging to this special and prestigious organization. Special because of the opportunities to be of service along with you. Prestigious because to become a member one must be the spouse of a physician.

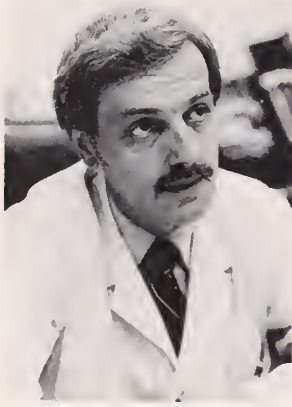
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The President Speaking

Our Patients Speak

CARL G. EVERS, M.D.
Jackson, Mississippi

At the 110th Annual Session of the association the House of Delegates approved an independent public opinion survey of Mississippians on how they perceived their medical care. The poll is part of an overall assessment of health needs in our state by a committee of the association which will lead to recommendations and an official position paper in this regard.

The committee's report will be completed in the next few weeks and distributed to the membership. At this time it is interesting to note some of the general findings of our public opinion survey.

The public opinion survey indicates that Mississippians generally feel that their health care is good and improving. They also look toward the medical profession to provide the primary leadership in improving medical care in the state. They repose great trust and confidence in us. In a comparison of the honesty and ethical standards of our profession with other groups (i.e. engineers, college teachers, journalists, lawyers, labor leaders, politicians, etc.) our profession ranked first. Politicians ranked last just behind labor union leaders.

However, there are some factors in the survey which could erode the image of our profession. These will be addressed in the report of the committee examining health needs in our state. There are concerns about lack of personal attention and the cost of medical care.

The cost issue came out in responses to several questions. A substantial number of Mississippians believe that rising medical costs are becoming a barrier to people getting the care they need.

In summary, it appears that our profession is still the most respected of all occupational groups. However, we can not afford to ignore a growing public dissatisfaction with certain aspects of health care for which only we can administer an effective cure. The public (our patients) expect us to do so and I have confidence that we will.

★★★

Physician Accountability

A recent court decision awarded the plaintiff a settlement as a result of inadequate genetic counseling. While this suit may have had some merit, it appears on the surface that there is no end to the accountability of physicians in their advice to and treatment of patients.

In the final analysis the costs of malpractice will be passed on to the taxpayers or the self-insured. If the penalty for malpractice were limited to suspension of medical licensure rather than monetary reward for the plaintiff, such suits would probably become virtually non-existent.

While such an idea might appear to relieve physicians of certain amount of responsibility to the patient, it is our strong contention that all physicians are concerned with the welfare of their patients. Foundations for medical care, third party review, utilization review, or similar groups, do a great deal to insure proper care as well as to prevent unnecessary utilization.

Further, as never before, licensure boards are closely monitoring the conduct and competence of physicians, and an M.D. degree no longer confers lifetime sanction, as it has done in past years.

All of these tend to result in better and more responsible medical practice. There is no question, however, that defensive medicine is an appreciable factor in rising medical costs. Eventually the "Great Father" in Washington may have to solve this dilemma.

W. MONCURE DABNEY, M.D.
Editor
Crystal Springs, MS

MSMA's Disabled Physicians' Program

The disease of alcoholism and drug addiction is now recognized as a prime occupational hazard in the practice of medicine. Knowledgeable authorities conservatively estimate that one out of 10 physicians will be addicted to alcohol and/or drugs at any given time.

These same authorities also point out that addiction is a hazard in the practice of medicine for a number of reasons: The physician often finds it

necessary to prescribe drugs to patients who have the same symptoms which the physician himself experiences; the "invincibility ethos" so carefully developed in medical school often makes it difficult for the physician to admit a personal medical problem; the stress of professional obligation and responsibility is always present and ever increasing while time for relaxation is always at a premium. It becomes very tempting, very easy, to turn to a mood changing drug — alcohol or whatever — when time is short and pressures are many. And thus insidiously addiction develops.

In recognition of this occupational hazard and the success of medical society sponsored programs to deal with the hazard, the most notable of which is perhaps in Georgia, the MSMA House of Delegates authorized establishment of a Disabled Physicians' Program at the 110th Annual Session in 1978. The Board of Trustees of the association has subsequently acted to implement the program.

Following experience of other states, the Mississippi Disabled Physicians' Program is based on two major premises: (1) the disabled physician for psychological reasons is unable to reach out for help, no matter how perilous his situation becomes; and (2) fellow physicians who would help the disabled physician must take the initiative, being careful to use a compassionate, nonjudgmental, nonpunitive approach.

The objectives of the Mississippi Disabled Physicians' Program will be to: (1) identify physicians who are disabled by reason of their addiction to, or abuse of, drugs including alcohol; (2) persuade as many of these physicians as possible to seek treatment voluntarily. During this process it is intended to protect the anonymity of the disabled physician and to give compassionate assistance not only to the physician but also to his or her family; (3) provide a practical and effective means of dealing with those physicians whose disability has been verified, but who either continue to deny their illness or refuse to complete a course of treatment. Here it is intended to protect the recalcitrant disabled physician, his family, patients, and the medical community against the irresponsible behaviour which is characteristic of addiction.

The above objectives will be implemented by two MSMA committees, namely the Physicians' Consultant Committee and the Judicial Council.

The primary role of the Physicians' Consultant Committee is that of advocate of the disabled physician. The committee is composed of both rehabilitated physicians and physicians interested in the disease of drug addiction. All members of the committee are familiar with the characteristics of addictive diseases and will be prepared to confront and motivate the disabled physician.

The functions and responsibilities of the Physicians' Consultant Committee include all the voluntary phases of the MSMA Disabled Physicians' Program, namely to: (1) Carry out an intense statewide program of education about the nature of addiction and the services offered by the committee; (2) Establish identification of disabled physicians; (3) Create a trusting relationship with the disabled physician and his family; (4) Motivate the disabled physician to seek and complete effective treatment; (5) Act as advocate of the disabled physician as needed in his relationship with spouse, family, professional peers or other areas of pressure; (6) Assist the disabled physician in realistic planning for his treatment, rehabilitation and subsequent re-entry into professional activities; (7) Provide moral support and practical aid to the disabled physician and his or her family from the time of identification through all ensuing steps of rehabilitation.

The MSMA Judicial Council is charged with enforcement and interpretation of the "Principles of Medical Ethics." In that capacity the primary role of the Council as related to the disabled physician is that of protector of the collective professional integrity of the medical community. The Council will refer complaints of addiction to the Physicians' Consultant Committee for verification and motivation toward voluntary treatment. Failing the efforts of the Physicians' Consultant Committee in this regard the Judicial Council will make recommendations to the Mississippi State Board of Health concerning the status of the disabled physician. Recommendations of the Judicial Council will relate to the Mississippi Medical Practice Act dealing with revocation or suspension of the license to practice medicine because of addiction and/or mental and physical incapacity.

Further information and assistance from the Mississippi Disabled Physicians' Program may be obtained by calling 1-800-682-6415 or by writing MSMA's Disabled Physicians' Program, Box 5229, Jackson 39216. All personal inquiries are held in the

Dr. Moffitt is a member of the MSMA Board of Trustees and Physicians' Consultant Committee.

strictest confidence and are answered by a member of the MSMA Physicians' Consultant Committee.

ELLIS M. MOFFITT, M.D.
Jackson, MS

Medico-Legal Brief

Hospital's Denial of Staff Privileges Not Improper

A hospital did not improperly deny a black physician staff privileges, a federal trial court in Mississippi ruled.

The physician had surgical privileges in a hospital in Natchez, Mississippi, and applied for privileges at a county hospital in 1972. The hospital had been operated on a racially segregated basis until 1967. There were no black physicians on the staff, although there was a black dentist, and the hospital Board of Trustees had two blacks among its seven members. In verifying the information in his application, the hospital discovered that he had been involuntarily committed to a state hospital in 1970, and released against medical advice. A psychiatrist had diagnosed his condition as a mild chronic paranoid reaction, aggravated by stress. The county hospital denied his application but did not advise him of the reason or advise him of his right to appeal.

After he filed a complaint against the hospital, a local HEW official requested the hospital to reconsider his application. The hospital then requested him to resubmit his application and furnish additional information on an earlier suspension from a hospital's medical staff and on his involuntary commitment.

The physician resubmitted the application but without the new information. In June 1974, the hospital again rejected his application because of discrepancies in statements about his residency and board eligibility and his questionable mental state. The physician then requested a hearing under the hospital's bylaws. The request was granted, a hearing was held over a three month period, but his application was denied again.

On appeal to a trial court, the court ruled that the hospital had not improperly denied the physician privileges. The physician had failed to show that the hospital's decision was arbitrary, irrational, racially motivated or based on grounds other than his professional qualifications.

An appellate court affirmed the decision without written opinion. — *Battle v. Jefferson Davis Memorial Hospital*, 451 F.Supp. 1015 (D.C., Miss., June 2, 1976); judgment affirmed without written opinion, 575 F.2d 298 (C.A.5, Miss., May 19, 1978)

PERSONALS

CURTIS W. CAINE of Jackson has been re-elected to the board of the Association of American Physicians and Surgeons. Mrs. Caine was elected president of the auxiliary at the recent AAPS meeting in Denver.

JOHN COURSEY of Biloxi gave a presentation on cardio-pulmonary resuscitation at the meeting of the general medical staff of Gulf Coast Community Hospital. Dr. Coursey is chief of anesthesia services at the hospital.

ILEY F. DILLON announces the opening of his office for the practice of internal medicine at 131 Jefferson Davis Boulevard in Natchez.

MARSHALL STONE ELLIS announces the opening of his office for the general practice of medicine at Westgate Center in the Arcade in Clarksdale.

P. S. GANARAJ and S. K. PURHOIT of Tylertown were recently inducted as fellows of the American College of Surgeons.

GEORGE C. HAMILTON of Jackson announces the relocation of his office to Suite C4, 1050 N. Flowood Drive in Jackson for practice limited to psychiatry.

WILLIAM JAMES HUBBARD, JR., began the practice of family medicine Dec. 1, 1978, in Magee and is affiliated with Magee Medical and Surgical Clinic.

The Daughters of the American Revolution have presented the Americanism medal of honor to HUGH JOHNSTON of Vicksburg.

K. N. MANIKTAHLA announces the opening of his office for the practice of urology at the Medical Arts Building on Highway 7 South in Water Valley.

FRANK T. MARASCALCO and GLENN L. WEGENER of Clarksdale have been recertified by the American Board of Obstetricians and Gynecologists.

R. C. O'FERRALL and T. K. WILLIAMS of Jackson announce the removal of their office to 309 Medical Arts Building, 1151 North State Street.

STEVE SHIRLEY has associated with Family Medical Clinic, P.A., as a family practitioner in New Albany.

ROBERT R. SMITH of Jackson and KENNETH J. GAINES, CARL R. HALE, GERALD ROBERTSON and RALPH T. WICKER, all of Hattiesburg, were guest speakers at a medical education seminar on cerebral vascular disease sponsored by Forrest General Hospital in Hattiesburg and the Hattiesburg Clinic, P.A.

JOHN B. RUSSELL announces the opening of his office for the general practice of medicine at 8 West Marion Street in Pontotoc.

VIRGINIA TOLBERT of Ruleville received an award of recognition from Governor Cliff Finch for her efforts in planning program content for the Governor's Rural Health Conference II.

The Mississippi Allergy Clinic, P.A. (Drs. TRIPLETT, MOFFITT, MITCHELL, COLE and BOOTH), of Jackson has opened a branch office on the Mississippi Gulf Coast in the Medical Plaza Building, Suite 102, 127 Lameuse Street in Biloxi for the consultation and treatment of allergic diseases.

R. FASER TRIPLETT of Jackson was recently installed as president of the Jackson Country Club.

BILLY M. WANSLEY announces the relocation of his office for the practice of internal medicine to 150 Washington Loop, corner of Washington and Main, Biloxi.

DEATHS

HURT, A. DABNEY, Corinth. Born Corinth, MS, Oct. 7, 1905; M.D., University of Illinois College of Medicine, Chicago, 1931; interned Augustan Hospital, Chicago, one year; surgery residency, McCloskey V.A. Hospital, Temple, TX, 1946-48; died Nov. 29, 1978, age 73. Emeritus member of MSMA and AMA.

NEW MEMBERS

BROWN, JAMES LEO, Tupelo. Born Jacksonville, FL, Sept. 22, 1949; M.D., University of Alabama School of Medicine, Birmingham, 1974; interned and internal medicine residency, University Medical Center, Jackson, MS, 1975-78; elected by Northeast Mississippi Medical Society.

CARON, JOHN, Meridian. Born Rimouski, Quebec, Canada, Feb. 4, 1928; M.D., McGill University Faculty of Medicine, Montreal, Canada, 1952; interned Victoria General Hospital, Halifax, Nova Scotia, one year; residency in anesthesiology, Camp Hill V.A. Hospital, Halifax, Nova Scotia, 1953-54; residency in anesthesiology, Montreal General Hospital, Montreal, Canada, 1955-58; elected by East Mississippi Medical Society.

CHARLESWORTH, ERNEST N., Jackson. Born Denver, CO, June 11, 1945; M.D., University of Texas

NEW MEMBERS / Continued

Medical Branch, Galveston, 1971; interned Wilford USAF, Lackland AFB, San Antonio, TX, 1971-72; dermatology residency, same, 1973-76; elected by Central Medical Society.

COLEMAN, MICHAEL WALLACE, Greenwood. Born Memphis, TN, July 31, 1947; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned UMC, Jackson, MS, one year; ophthalmology residency, same, 1975-78; elected by Delta Medical Society.

COVINGTON, FRANK LEE, JR., Meridian. Born Jackson, MS, Aug. 16, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned and psychiatry residency, same, 1975-78; elected by East Mississippi Medical Society.

DOMINICI, RAYMOND HENRY, Meridian. Born Somerville, NJ, Oct. 16, 1938; M.D., Hahnemann Medical College and Hospital, Philadelphia, PA, 1965; interned Maine Medical Center, Portland, one year; general surgery residency, same, 1966-70; elected by East Mississippi Medical Society.

GIBSON, WILLIAM JASON, JR., Jackson. Born Big Spring, TX, Dec. 13, 1946; M.D., University of Mississippi School of Medicine, Jackson, 1972; interned University Hospital, Jackson, MS, one year; general surgery residency, same, 1973-77; fellowship in surgical oncology, M. D. Anderson Hospital, Houston, TX, 1977-78; elected by Central Medical Society.

HAMWAY, SAMMY ANISE, Clarksdale. Born Mafrak, Jordan, June 23, 1944; M.D., Medical School American University of Beirut, Beirut, Lebanon, 1968; interned, same, one year; general surgery residency, Chapel Hill, NC, 1969-70; general surgery residency, Greater Baltimore Medical Center, MD 1970-71; urology residency, Tulane, New Orleans, LA, 1973-75; renal transplantation, Cleveland Clinic, OH, 1975-76; urology residency, Tulane, New Orleans, 1976-78; elected by Clarksdale & Six Counties Medical Society.

HUNT, FREDERICK ROY, Meridian. Born Tarrytown, NY, July 4, 1931; M.D., Medizinische Fakultät Philipps Universität, Marbury Lahn Hessen, West Germany, 1962; interned Bon Secours Hospital, Grosse Pointe, MI, one year; internal medicine residency, Bernalillo County Medical Center, Albuquerque, NM, 1964-66; elected by East Mississippi Medical Society.

MARASCALCO, ROBERT, Vicksburg. Born Grenada, MS, July 27, 1944; M.D., University of Mississippi School of Medicine, Jackson, 1972; interned Ochsner Foundation, New Orleans, LA, one year; orthopaedic residency, same, 1973-76; orthopaedic residency, Tulane, New Orleans, 1976-77; elected by West Mississippi Medical Society.

MORRISON, WILLIAM ANDREW, Hattiesburg. Born Iowa City, IA, Sept. 28, 1946; M.D., University of Michigan Medical School, Ann Arbor, 1972; interned Butterworth Hospital, Grand Rapids, MI, one year; orthopaedic residency, Blodgett Memorial Medical Center, Grand Rapids, 1973-76, and Henry Ford Hospital, Detroit, 1976-77; elected by South Mississippi Medical Society.

TODD, JAMES RAY, JR., Natchez. Born Natchez, MS, Mar. 27, 1942; M.D., Meharry Medical College School of Medicine, Nashville, TN, 1967; interned George Hubbard Hospital, Nashville, one year; general surgery residency, same, 1968-72; elected by Homochitto Valley Medical Society.

WHALEY, LANCE DEWEY, Cleveland. Born Montgomery, AL, Dec. 23, 1943; M.D., University of Alabama School of Medicine, Birmingham, 1971; interned St. Vincents Hospital, Birmingham, one year; ob-gyn residency, University of Tennessee, Memphis, 1972-75; elected by Delta Medical Society.

POSTGRADUATE CALENDAR

Mar. 1-3, 1979

SURGICAL FORUM VI

Holiday Inn Downtown, Jackson

Sponsored by the University of Mississippi School of Medicine, Department of Surgery and the University Medical Center Division of Continuing Health Professional Education.

Coordinator: James D. Hardy, M.D., professor of surgery and department chairman, University of Mississippi School of Medicine.

An international guest faculty will join Medical Center faculty in presenting the three-day program for the general surgeon. Advance registration is required. Fee: \$175.00. Credit: 17 contact hours, 1.7 CEU, Category 1 of the Physician's Recognition Award, AMA.

Mar. 16-17, 1979

RENAL UPDATE FOR THE HEALTH PROFESSIONAL
Holiday Inn Medical Center

Sponsored by the University of Mississippi School of Medicine Department of Medicine, the University of Mississippi School of Nursing and the University Medical Center Division of Continuing Health Professional Education.

Coordinator: John D. Bower, M.D., professor of medicine, University of Mississippi School of Medicine and director of the artificial kidney unit, University Hospital.

The seminar is a joint offering for primary care physicians and registered nurses. Sessions for the physician will center on treatable and reversible renal diseases, including interpretation of procedures and tests needed for diagnosis and a discussion of mechanisms of reversible disease processes. The course will review recent developments in peritoneal dialysis and its implementation. Fee: \$45.00. Credit: 11 contact hours, 1.1 CEU, Category 1 of the Physician's Recognition Award, AMA.

Mar. 21, 1979

UPDATE ON CHRONIC PAIN MANAGEMENT
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Departments of Psychiatry and Human Behavior, Neurology, Neurosurgery, Anesthesiology, and Surgery Division of Orthopedics and the University Medical Center Division of Continuing Health Professional Education.

Coordinator: Dr. Steve H. Sanders, Ph.D., assistant professor of psychiatry and human behavior (psychology), University of Mississippi School of Medicine; executive coordinator, pain clinic; and director of psychiatry biofeedback services, University Hospital.

The program will focus on multidisciplinary techniques to better manage patients suffering from chronic back or head pain. The proper and coordinated use of surgical, drug and psychological/behavioral treatment methods will be discussed. The program is designed for family medicine practitioners, internists, neurologists, neurosurgeons, orthopedic surgeons, anesthesiologists, psychiatrists and psychologists. Fee \$40.00. Credit: 7 contact hours, .7 CEU, Category 1 of the Physician's Recognition Award, AMA.

Mar. 22-23, 1979

CLINICAL NEUROLOGY REVIEW
Sheraton Motor Inn, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Neurology, the Veterans Administration Center Neurological Service and the University Medical Center Division of Continuing Health Professional Education.

Coordinator: Shri K. Mishra, M.D., assistant professor of neurology, University of Mississippi School of Medicine and chief of neurology service, Veterans Administration Center.

Recent advances in diagnosis and treatment of common neurological disorders will be discussed. Topics will include management of headaches, diagnosis and management of stroke and neuromuscular diagnostic tests. Fee: \$100.00. Credit: 13 credit hours, 1.3 CEU, Category 1 of the Physician's Recognition Award, AMA.

FUTURE CALENDAR

Mar. 16-17, 1979

RENAL UPDATE
University Medical Center, Jackson

Mar. 21-22, 1979

PAIN SYMPOSIUM
University Medical Center, Jackson

Mar. 22-23, 1979

CLINICAL NEUROLOGY REVIEW
Sheraton Motor Inn, Jackson

April 16-19, 1979

PULMONARY MEDICINE INTENSIVE
University Medical Center, Jackson

April 20-21, 1979

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
Singing River Hospital, Pascagoula

All continuing education correspondence should be addressed to: Continuing Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

MSMA Tennis Tournament at

111th Annual Session
Wednesday Afternoon, May 9
Biloxi Hilton

MEETINGS

National and Regional

American Medical Association, James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.
 Louisiana-Mississippi Ophthalmological & Otolaryngological Society, April 19-20, 1979, Broadwater Beach Hotel, Biloxi, MS. Ben A. Davis, Jr., CAE, Executive Secretary, P.O. Box 12314, Jackson, MS 39211, telephone (601) 956-7787.
 The New Orleans Graduate Medical Assembly, "Management of Common Problems in Office Practice — Update"; April 27-May 1, 1979, The Fairmont, New Orleans, LA. Lois Neary, Executive Director, 1430 Tulane Avenue, New Orleans, LA 70112.

State and Local

Mississippi Academy of Family Physicians, Annual Meeting, July 11-14, 1979, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.
 Mississippi State Medical Association, 111th Annual Session, May 7-10, 1979, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.
 Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638, Counties: Amite, Wilkinson.
 Central Medical Society, 1st Tuesday, January, April, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., B6 Medical Arts Bldg., 1151 N. State St., Jackson 39201. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson, Yazoo.
 Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.
 Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 p.m., Clarksdale. Henry McCrory, Secy., P.O. Box 340, Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.
 Coast Counties Medical Society, 1st Wednesday, January, March, May, September and November. H. S. Barrett, Secy., P.O. Box 1898, Gulfport 39501. Counties: Hancock, Harrison, Stone.
 Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington.
 DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.
 East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. W. W. East, Secy., P.O. Box 4128 West Station, Meridian 39301. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.
 Homochitto Valley Medical Society, 1st Tuesday, February, June, September, December, Ramada Inn, Natchez. Walter T. Colbert, Secy., P.O. Box 1167, Natchez 39120. Counties: Adams, Jefferson.
 North Central District Medical Society, 3rd Wednesday, March, June, September, December. Bernard Hunt, Secy., 1196 Mound St., Grenada 38901. Counties: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, Webster.
 Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. James M. Cooper, Secy., 605 Garfield St., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, March, August, December. Cherie Friedman, Secy., 424 South 5th, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.
 Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.
 Prairie Medical Society, 2nd Tuesday, March, June, September, December. Thomas Waller, Secy., P.O. Box 1487, Starkville 39759. Counties: Clay, Oktibbeha, Lowndes, Noxubee.
 Singing River Medical Society, 3rd Monday, February, May, August, November. Robert D. Holbert, Secy., P.O. Box 1502, Pascagoula 39567. County: Jackson.
 South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.
 South Mississippi Medical Society, 2nd Thursday, March, June, September, December. Clyde Allen, Secy., 1245 N. 6th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.
 West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, Secy., The Street Clinic, Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Northeast Mississippi Regional Medical Center
 830 Gloster Avenue
 Tupelo, MS 38801
 Council on Scientific Assembly
 Mississippi State Medical Association
 735 Riverside Drive
 Jackson, MS 39216
 Forrester General Hospital
 Box 1897
 Hattiesburg, MS 39401
 Mississippi Baptist Hospital
 1225 N. State Street
 Jackson, MS 39201
 Mississippi Radiological Society
 316 Medical Arts Building
 Jackson, MS 39201
 Gulf Coast Community Hospital
 4642 W. Beach Boulevard
 Biloxi, MS 39531
 Jefferson Davis Memorial Hospital
 Box 1488
 Natchez, MS 39120
 King's Daughter Hospital
 Box 948
 Brookhaven, MS 39601
 Delta Medical Center
 Greenville, MS 38701
 Riverside Hospital
 Lakeland Drive
 Jackson, MS 39208
 Northwest Mississippi Regional Medical Center
 Box 1218
 Clarksdale, MS 38614
 Mississippi Chapter
 American College of Surgeons
 Box 5229
 Jackson, MS 39216
 Mercy Regional Medical Center
 100 McAuley Drive
 Vicksburg, MS 39180
 St. Dominic-Jackson Memorial Hospital
 Lakeland Drive
 Jackson, MS 39216

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Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics (i.e., clindamycin, erythromycin, tetracycline, streptomycin) may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthal reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

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MEDICAL ORGANIZATION

Emergency Medical Services Symposium Is This Month

The 1979 Statewide Symposium on Emergency Medical Services will be held Feb. 14-16, 1979, at the Coliseum Ramada Inn in Jackson.

Theme of this year's symposium is "Emergency Medical Service — It's More Than a Ride to the Hospital."

The seminar has a three-fold program. Special attention to the future of paramedic training in Mississippi will be the focus of the first day. Information pertaining to the training of paramedics will be presented, physician and nurse involvement will be discussed, and communications aspects of paramedic activities and national trends in advanced life support will be examined.

The program for the 15th and 16th will cover the subject of poisoning, including different types of poisonings, handling of poison patients, and the use of the new state Poison Control Center currently being developed at University Medical Center.

This year's schedule of activities introduces a new event — team competition for EMT's, nurses and physicians, with awards to be presented at the concluding breakfast.

The symposium is certified for continuing education credit with EMT's receiving a total of 20 points for attending the entire meeting. Nurses will receive 1.78 C.E.U's through the Mississippi Nurses Association. Physician education credit, 13 contact hours, will be available through the Mississippi Chapter American College of Surgeons Trauma Committee.

The event is co-sponsored by the Mississippi Nurses Association, UMC Poison Services, Mississippi Chapter American College of Surgeons Trauma Committee, and EMS Division of the Mississippi State Board of Health.

For additional information contact Division of Emergency Medical Services, P. O. Box 1700, Jackson, MS 39205.

Physician Captives Report Success

"Physician owned insurance companies are so successful it would be difficult for a commercial

carrier to compete with them." That was the thrust of remarks of speakers at a recent legal medicine symposium in Washington, D. C.

"Because our carrier is made up of physicians we can try to regulate the quality of medicine," Dr. David Rubasamen, medicolegal consultant to a physician's insurance firm in California related. "For example," he said, "the firm will not insure plastic surgeons who do not have certain resuscitative equipment in their office — and similar requirements are placed on other specialists."

Dr. William Walker, president of the Professional Insurance Management Company of Jacksonville, FL, the self insurance organization formed by the Florida Medical Association, said his group is working with three hospitals to develop a "loss prevention" program.

The hospitals contribute half the costs of the program, his insurance company provides the rest, and the Florida Medical Association provides technical help.

Drug Education Program Is Announced

The Mississippi Clearinghouse for Alcohol and Drug Abuse Information announces that guidelines for regional drug education programs for second offenders of possession of less than an ounce of marijuana have been completed. The guidelines are the result of two years' work by a task force of Division of Alcohol and Drug Abuse staff and personnel from the state's community mental health centers' alcohol and drug programs.

The 1977 session of the Mississippi Legislature enacted House Bill 72, which changed the state's marijuana laws, reducing the penalties for possession of less than an ounce of the substance.

First and second convictions of possession of less than an ounce are non-criminal offenses with no criminal record, but second offenders (within two years) are required by the law to "participate in a drug education program, approved by the Division of Alcohol and Drug Abuse of the State Department of Mental Health, unless the court enters a written finding that such drug education program is inappropriate."

Internal Medicine Course Approved by AMA

A self-study audio-visual course entitled "Intensive Review of Internal Medicine," developed under the auspices of Harvard Medical School and Peter Bent Brigham Hospital of Boston, is now available to physicians.

The course, which contains material on 13 specialties in internal medicine, was designed to keep the practicing physician abreast of the latest developments in internal medicine. It consists of 63 lectures on audio-cassettes and two books containing more than 700 related illustrations and tables, as well as other reference materials.

Subjects included in the review course are hematology, pulmonary diseases, oncology, cardiology, nephrology, infectious diseases, endocrinology, dermatology, allergy-immunology, gastroenterology, neurology, rheumatology and radiology.

The course has been approved for 45 credits in Category 1 toward the Physician's Recognition Award of the American Medical Association. For more information, write to "Intensive Review of Internal Medicine," P.O. Box 1289, Boston, MA 02103.

Federal Agencies Threaten Science Journals

The future of scientific journals is being seriously threatened by the federal government in the United States, the *Journal of the American Medical Association* charges in an editorial in the Jan. 5 issue.

The attack on the journals — the most important means of communication of new research knowledge among scientists — has been launched by the Internal Revenue Service, the Interstate Commerce Commission and the U. S. Post Office, says *JAMA* Editor William R. Barclay, M.D.

The IRS already has told the publishers of 90% of the chemistry and physics journals in the United States that it plans to revoke their tax-exempt status, and has notified the American Chemical Society and the American Institute of Physics that they are no longer to be treated as tax-exempt organizations, says Dr. Barclay. The IRS also has brought action against the American Medical Association.

The Interstate Commerce Commission is studying AMA publications, "with the obvious intent of penalizing the AMA in its legitimate and valuable

role of disseminating scientific information." The postal service is proposing a new rate structure that will be prohibitively expensive for many scientific societies and may result in sharp curtailment of their publications, he charges.

New Assistant Professor Added to UMC Faculty

An assistant professor of family medicine has joined the School of Medicine faculty at the University of Mississippi Medical Center. Dr. Norman C. Nelson, UMC vice chancellor and medical school dean, announced the December appointment of Dr. Henry J. C. Scrimgeour following approval by the Board of Trustees, State Institutions of Higher Learning.

Dr. Scrimgeour had been in private practice in Perth, Western Australia, since 1975. He is former assistant to the director of Northern Medical Services in Laborador, Canada, and has served as a volunteer physician in India and Thailand.

After taking medical training at St. Andrews University in Scotland, Dr. Scrimgeour interned at Scotland's Arbroath Infirmary and Dundee Royal Infirmary. He was a family medicine fellow at Dalhousie University in Canada in 1973. Dr. Scrimgeour is a member of the College of Family Physicians of Canada and the Medical Defense Union of Western Australia.

Emergency Medical Care Unit Opens at Capitol



Shown setting up the MSMA sponsored Legislative Emergency Medical Care Unit for the 1979 Regular Session of the Mississippi Legislature are association president, Dr. Carl G. Evers, Jackson, and registered nurse, Mavis Barlow. The legislative EMCU opened Jan. 2 as the Mississippi Legislature convened its final 90 day session of the 1976-79 term.

Lions Club Establishes Lectureship at UMC



The Jackson Central Lions Club has established a visiting lectureship in ophthalmology at the University of Mississippi Medical Center. Club president John Schneider (left) made a \$1,000 presentation to Dr. Norman C. Nelson, UMC vice chancellor and School of Medicine dean, to initiate the new program. The Jackson club plans to sponsor the series of visiting ophthalmology lecturers for UMC medical students annually. Internationally, Lions Clubs support numerous projects for prevention and treatment of eye diseases. The Jackson Central Club also helps support the Mississippi Lions' Eye Bank and service programs to provide eye examinations.

UMC Scientists Study Prostaglandins

Prostaglandins are hormones produced in many parts of the body, including the kidney. Previous studies with these renal prostaglandins indicated they might be effective in lowering blood pressure. New research in the UMC physiology and biophysics department suggests they are not. In fact, they result in an increase in blood pressure.

That is the conclusion of Dr. Gregory Hockel, instructor, and his co-investigator, Dr. Allen Cowley, professor, who presented their findings at a November meeting of the American Physiological Society.

Depending on the location of their origin, prostaglandins affect the nervous system, circulation, muscle contraction and metabolism. Prostaglandins produced in the kidneys were first isolated in the early 1960's. Since then, a number of studies designed to define the role of these hormones in renal function have described their effects when infused into the kidney. The prostaglandins caused renal blood vessels to dilate and resulted in excess salt and water excretion from the kidney. Their action was

believed to be similar to diuretics, commonly prescribed for high blood pressure. Based on these findings, other investigators had theorized the prostaglandins' role as an antihypertensive agent. But all previous studies were done in unconscious animals, and conclusions were based on infusions lasting 100 minutes at the most.

"We wanted to explore the long-term effects of prostaglandin infusion into the kidneys of conscious animals," Dr. Hockel said.

Measuring results over a seven day period, the UMC scientists found the same salt and water loss described by earlier investigators. But at the end of the first day, blood pressure was up five mm. of mercury. At the end of the second day, blood pressure had risen to 15 mm. above normal, where it remained until the end of the seventh day.

They also measured increased renin secretion from the infused kidney which Dr. Hockel believes accounts for the unexpected hike in blood pressure. "Renin activity results in the formation of the powerful vessel constrictor, angiotensin II," Dr. Hockel explained.

The team is now trying to find out if the observed increase in blood pressure can be sustained during even longer periods of prostaglandin infusion.

Dr. Hockel points out that this research may have clinical implications for the hereditary disorder known as Bartter's Syndrome. Most prominent in children, the condition is characterized by high renin levels in the blood and an excessive loss of salt. Excess prostaglandin synthesis has been associated with Bartter's Syndrome and in some cases, treatment with prostaglandin inhibitors has been effective.

Breast Cancer Conference Scheduled

The National Conference on Breast Cancer will sponsor the 18th annual conference on detection and treatment Mar. 5-8, 1979, at the Atlanta Hilton Hotel.

This conference is approved for 27 hours AMA Category 1 credit and for 21 cognates in Category 1 by the American College of Obstetricians and Gynecologists.

For more information, contact the American College of Radiology, 6900 Wisconsin Avenue, Chevy Chase, MD 20015.

Annual Session, May 6-10, 1979

ORGANIZATION / Continued

Effects of Smoking Demonstrated at Capitol



Governor Cliff Finch, left, studies the effects of smoking on lung tissue as demonstrated by Dr. Charles N. Floyd of Gulfport, prior to a recent session of the Legislature. (Photo taken by Jimmy Dempsey of the Jackson Daily News.)

Influenza Surveillance for 1978-79 Is Announced

Influenza is an acute respiratory illness characterized by the sudden onset of headache, myalgia, fever, and prostration and of a specific viral etiology. The illness usually resolves within 3-7 days. The periodic epidemics of influenza A usually peak within 2-3 months and disease activity quickly dissipates. Depending upon the prior immunity levels to the specific strain, the attack rate in the community may be as high as 50 per cent. A number of other bacterial and viral agents may produce the influenza syndrome and specific diagnosis rests with viral isolation or serologic tests in the individual case. An outbreak of illness with the clinical and epidemiologic features of influenza can be considered to be such particularly if several representative cases are confirmed by laboratory methods, according to Dr. Durward Blakey, director of the State Board of

Health's Bureau of Disease Control.

The experience with influenza in Mississippi last year was similar to that seen elsewhere in the United States. In January and February outbreaks occurred affecting all age groups with the virus identified as being an H₃N₂ influenza A virus similar to the 1968 Hong Kong strain by serology; both the A-Texas and A-Victorian strains were isolated in the state. In late February and March 1978, many communities experienced explosive outbreaks of flu affecting almost exclusively those under age 25; serologic studies in Starkville High School students confirmed serologic evidence of infection with the H₁N₁ strain of influenza A (A/USSR/77) in over 60 per cent of several hundred students tested. Although high school absenteeism occurred during the second influenza outbreak, there was no associated increase in industrial absenteeism, hospitalizations, or pneumonia.

The State Board of Health cooperates with the Center for Disease Control in the national surveillance of influenza with objectives to identify the occurrence and extent of influenza activity and also to identify the particular strain responsible. It is uncertain as to which, if any, influenza viruses may result in outbreaks this particular year. Surveillance plans this year are composed to two parts, one passive and the other active.

Passive System — All physicians, clinics, or other individuals are encouraged to report outbreaks of flu-like illness by telephone or reportable disease cards; the number of flu cases seen the preceding week can be marked on the back of the card and provides useful information on the timing and geographic extent of outbreaks.

Active System — This year the health department will be working more closely with nine clinics and offices over the state to monitor the visits for flu-like illness on a daily basis. Five of these are at college or university health clinics and will hopefully provide early indications of influenza activity as well as enable more diagnostic specimens, according to Dr. Blakey.

The CDC Laboratory performs all the MSBH laboratory tests for influenza. The State Board of Health is interested in confirming the diagnosis of several cases during any outbreak of influenza-like disease that occurs.

Serologic diagnosis requirements include:

- 1) 2-3 cc of serum obtained within a few days of illness onset and, again two to four weeks later.
- 2) Patient and physician identification data, date of onset, and brief description of symptoms and signs (include maximum known temperature if possible).

Virus isolation requirements are:

1) Throat swabs must be obtained from patients as early in the illness as possible, certainly *no later than 3 days following the date of onset*.

2) Patient and physician identification data, date of onset, and brief description of symptoms (maximum known temperature if possible).

3) Throat swabs are placed in tryptase-phosphate-gelatin broth and refrigerated (*not* frozen) until transport.

4) Shipping with freezer pack or wet ice should be accomplished so that specimens will *arrive at the State Laboratory no longer than 48-72 hours after they are collected*.

Serologic studies are more easily obtained since there is no urgency in shipping but difficulties arise in obtaining the convalescent serum; specific strain identification cannot be done. Serologic studies are more useful to the physician seeing a small number of cases. Viral isolation is preferred for strain identification and does not require phlebotomy. Difficulties with specimen handling and shipping make it most useful when 5-6 specimens can be obtained within a day or two and promptly shipped. Isolation attempts will be emphasized at the specific active surveillance sites this year but additional arrangements can be made by contacting the State Laboratory or Bureau of Disease Control, said Dr. Blakey.

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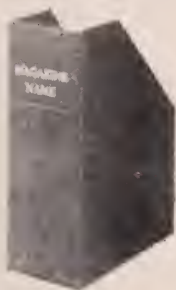
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In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by all authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

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IN CONCLUSION

Louisiana was the third state in 1978 to permit the prescription and use of marijuana under controlled circumstances for glaucoma and cancer chemotherapy patients. The Marijuana Prescription Review Board shall "certify the practioners who shall be licensed to prescribe marijuana, the patients who shall be authorized to use marijuana for therapeutic purposes, and the pharmacies which shall be licensed to dispense marijuana...." provided that they are state owned pharmacies. The Department of Health and Human Resources administers the La. program.

The Dental Project, a nonprofit organization whose purpose is to encourage the total elimination of tooth decay, gum problems and tooth loss has been established with headquarters in Nashville. Founders contend that dental disease is the most prevalent health problem in the world today and that nine out of every ten people will have some type of dental problem. The project is designed to be a broad-based alignment of individuals from all walks of life willing to commit themselves to work to change prevailing attitudes.

Doctors took a lesson from Vermont skiers to work out a treatment for Raynaud's Phenomenon, a medical condition characterized by inadequate blood circulation in the hands brought on by exposure to cold. The treatment--Wave the arms vigorously in the motion of a underhand softball pitcher. This forces blood into the fingers and relieves the condition. Raynaud's Phenomenon causes discomfort, vexation and sometimes, disability. It has been treated with drugs, and sufferers have been forced to avoid getting cold.

Prenatal clinics make an ideal setting for the prevention of the fetal alcohol syndrome and for referring women to treatment for drinking problems, according to Dr. H. L. Rosett, Boston University School of Medicine psychiatrist. Anticipating their new roles as mothers, pregnant women may be more receptive of being educated about the possible dangers of heavy drinking, both to their babies and to themselves. Babies born to women who drink heavily have twice as many congenital, growth and functional abnormalities as babies born to women who drink moderately or rarely.

Miscellaneous: Mandatory continuing medical education to maintain continued licensure has been adopted in Michigan...A recent count shows that 518,000 people, all of them blanketed by Britain's national health insurance plan, are awaiting surgery. They will wait for at least six months and for as long as five years...Complying with U.S. government regulations cost hospitals \$800 million last year. Cost per patient was approximately \$22....Women currently comprise nearly 15 per cent of all first-year dental students, according to the ADA.

Before prescribing, please consult complete product information, a summary of which follows:

The effectiveness of Valium (diazepam) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

ORAL: Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE: To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V., inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins, i.e., dorsum of hand or wrist, use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest, concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

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Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), i.e., phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

INJECTABLE: Although promptly controlled seizures may return, readminister if necessary, not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures, use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported, should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

INJECTABLE: Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure, employ general supportive measures, IV fluids, adequate airway. Use levarterenol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects. Dialysis is of limited value.

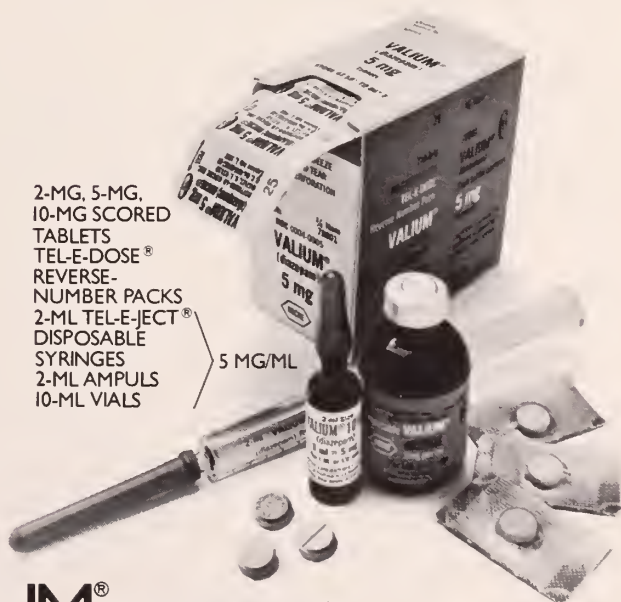
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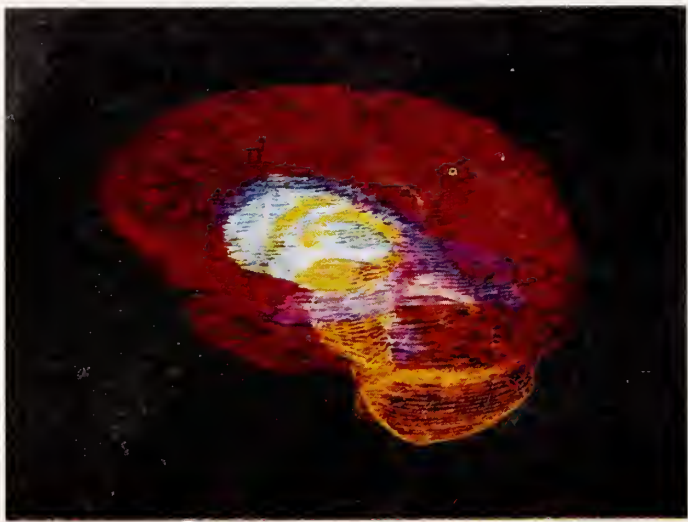
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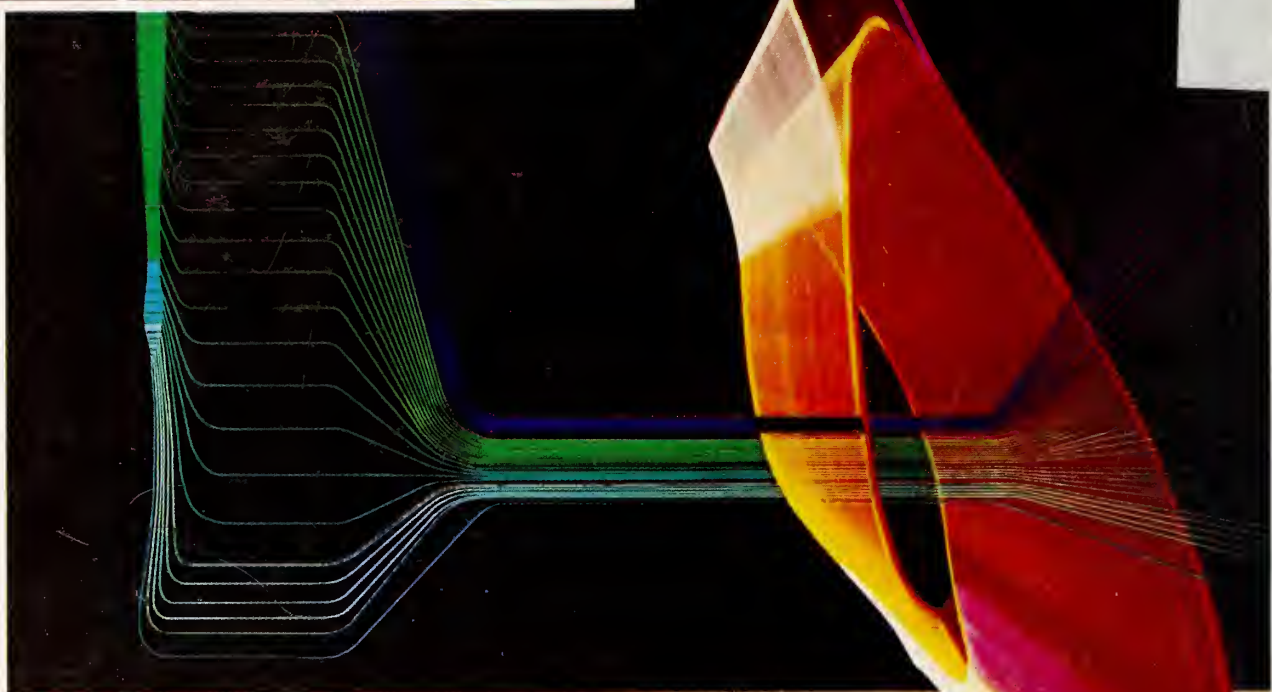
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The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication. Abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or over-sedation.

Side Effects: Drowsiness, confusion, diplopia.

hypertension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.



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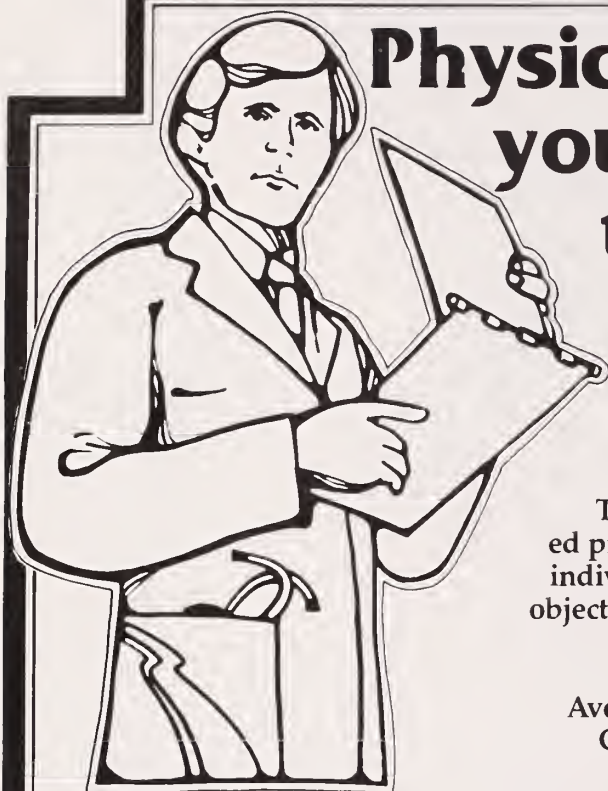
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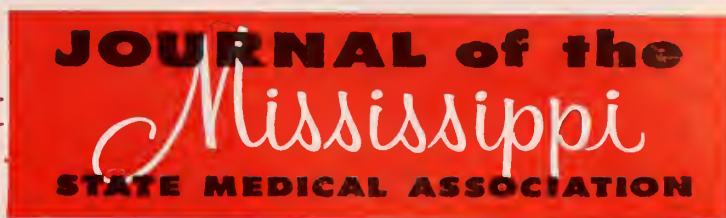
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Number 3

March 1979



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THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39216. Subscription rate, \$15.00 per annum (plus \$2.40 postage per year for foreign subscriptions); \$2.00 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, 735 Riverside Drive, Jackson, Mississippi 39216.

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(ISSN 0026-6396)



A reminder

ZYLOPRIM[®]

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim[®] (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease. Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol[®] (mercaptopurine) or Imuran[®] (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age: Zyloprim[®] (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular: There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim[®] (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic: There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVERDOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIED: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)



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Suppositories/Cream
for symptomatic relief

- Effectively reduces inflammation and edema
- Rapidly relieves pain and itching

ANUSOL-HC[®] SUPPOSITORIES

Hemorrhoidal Suppositories

ANUSOL-HC[®] CREAM

Rectal Cream with Hydrocortisone Acetate

CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth suboxide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth suboxide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani. Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol[®] Suppositories or Ointment.

Contraindications: Anusol-HC[®] Suppositories and Anusol-HC[®] Cream are contraindicated in those patients with a history of hypersensitivity to any of the components at the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning

and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes at 12 (N 0047-0089-12) and 24 (N 0047-0089-24), in silver foil strips with Anusol-HC W.C. printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01) with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F).

Full information is available on request.



Warner/Chilcott

Division, Warner-Lambert Company
Morris Plains, N.J. 07950

The professional source of anorectal comfort

AN-GP-91

NEWSLETTER

March 1979

Dear Doctor:

The private health insurance industry has launched a major advertising and public relations effort to get the public's help in stemming escalating health costs.

Theme of the communications program is "Let's Keep Health Care Healthy." Sponsored by the Health Insurance Association of America (HIAA), the program will reach approximately 40 million opinion leaders and influential members of business, labor, professional and consumer groups, spokesmen estimate.

HIAA is placing ads in national publications, establishing speakers bureaus, conducting educational forums and seminars and disseminating literature - all efforts geared to inform the public what they can do individually and collectively to stop health care costs from rising.

Statistics recently released show that American physicians have succeeded in their voluntary effort to hold down the rate of increase in their fees. Figures from the Bureau of Labor Statistics show that the all-items component of Consumer Price Index rose 8.6% during 1978. Medical care costs rose 8.5% in the same period, but physicians' fees rose only 7.8%. Hospital increases were also less in 1978.

Private enterprise has once again stepped in where government has failed. American Medical International gave Los Angeles school officials \$48,000 to keep alive nursing classes scheduled to be eliminated by budget cuts resulting from Proposition 13. Company officials saw Prop. 13 as public's expression against unnecessary bureaucracy and costly regulations, not a device to strike down essential and worthwhile services.

The confidential relationship between patients and physicians goes down the drain when federal funds are involved, says the American Family Practice newsletter in reporting a recent court decision. Minnesota supreme court ruled that names of state physicians who performed Medicaid abortions must be released to Catholic newspapers. Their names, number of abortions and total amount received from Medicaid was demanded.

The irony of a recent HEW conference did not go undetected. In December, Secretary Califano's group held a two-day conference to explore "fraud, abuse and error" in programs administered by the Department of Health, Education and Welfare. Of the more than 1,000 people who attended, most were bureaucrats. The conference theme? "Protecting the Taxpayers' Dollar."

Sincerely,



Patsy Silver
Managing Editor

National Committee Will Study Health Care Costs

The Committee for Responsible Health Care, a national citizens' committee with the purpose of providing "nonpartisan and objective information" to the American public on matters affecting the direction of health care in the U.S., was created in January. Chairman is retired Admiral Elmo R. Zumwalt, Jr.

Founders of the committee are: Dr. Michael E. DeBakey, heart surgeon and president of the Baylor University School of Medicine, Houston; William E. Simon and Robert B. Anderson, former Secretaries of the Treasury; William J. Casey, former president, Import-Export Bank; and Admiral Zumwalt.

Citing pressures for changes in the nation's health care system due to the rapid rise in health care costs, Admiral Zumwalt stated, "Unless carefully thought through and carried out, these changes could jeopardize the remarkable, complementary contributions that government, health care professionals, and the private sector generally have made to the nation's health through their traditional roles in the American health care system."

Spokesmen state that the committee intends to evaluate proposals for changing the American health care system with an eye toward strengthening development and management of health care resources "while maintaining the appropriate responsibilities and contributions of all elements of the health care system."

After analyzing proposals calling for changes, the committee will disseminate the analyses to the American public "so that individuals may play a more knowledgeable role in the decision-making processes which lead to these programs."

Courts Resolve More Malpractice Suits

The National Association of Insurance Commissioners reports that more medical malpractice claims are being resolved by the courts than in recent years. However, claims are taking significantly longer to be closed.

There has been an 11 per cent increase in the number of cases heard in court from 1976-78, and the average award has increased in amount from \$26,600 to \$34,000 from 1976-1978.

Tenuate®
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenitoin (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.

Cayey, Puerto Rico 00633

Direct Medical Inquiries to

MERRELL-NATIONAL LABORATORIES

Division of Richardson-Merrell Inc.

Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

**Whether overweight is a
complicating factor...
or just uncomplicated overweight.**

Tenuate® Dospan®^{IV} **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.
And it's responsible medicine.**

Merrell



For prescribing information see opposite page



The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions.

However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair, little or no self-care).



Motrin[®] 400 mg^{TABLETS}

ibuprofen, Upjohn

The confidence that comes from experience—
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001

The confidence that comes from experience—
one more reason to prescribe

Motrin 400 mg TABLETS

ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. Aspirin used concomitantly may decrease Motrin blood levels. Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea¹, epigastric pain², heartburn³, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness⁴, headache, nervousness. **Dermatologic:** Rash⁵ (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; ²3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

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NDC 0009-0733-01

Bottles of 500

NDC 0009-0733-02

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NDC 0009-0750-02

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NDC 0009-0750-06

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DATELINE

Origin of Impairment Minneapolis, MN - Residents suffer from emotional illness, Sometimes Residency marital discord, economic worries and drug and alcohol abuse to a greater degree than has usually been recognized. Findings were presented to a conference on the impaired physician sponsored by AMA and Minnesota Medical Association. Many residents who have no obvious problems adopt lifestyles and inappropriate defense mechanisms that lead to their impairment later in life.

AMA Now Emphasizes Chicago, IL - AMA has shifted its emphasis from weight Overall Health consciousness to overall health consciousness in a new booklet, "The Healthy Approach to Slimming." More than half of adults in the U.S. are either overweight or obese, AMA declares, defining obesity as 20% or more above ideal weight. The booklet says exercise may be equally as important as diet and nutrition. Physicians treating obese patients may want to order the pamphlet. Cost is \$1.00.

MMFES Initial Goals Jackson, MS - The Mississippi Medical Fraternal and Edu- Are Exceeded cational Society provided coverage to over 900 physicians and collected premiums in excess of \$1.5 million during its first year of operation, exceeding first year growth goals established by its consulting actuaries. The 19 physician-owned, medical society-sponsored companies which were operational in the U.S. in 1978 cover more than 78,000 physicians in 17 states.

Med Students Want Washington, D.C. - Medical students decried the level of Nutrition Courses nutrition education in their curricula and vowed to change that before the Senate Nutritional Subcommittee. Spokesmen for American Medical Student Association claim that only 19% of the U.S. medical schools require a nutrition course and only 70% offer it as an elective. They say very few M.D.s have expertise in the area of nutrition and of those who do, most gained this knowledge outside of the regular medical curriculum.

Malpractice Suits Washington, D.C. - The U.S. Department of Justice is draw- May be Screened ing up a proposal that would require all medical malpractice suits to be filtered by expert screening panels before they get into state courts. Noting the sixfold increase in malpractice insurance costs for hospitals over the past five years, Attorney General Bell says "weeding out unfounded claims and encouraging prompt and full settlement of those that are meritorious" would be less inflationary.

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Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* **Warning**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions, nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules, Single Unit Packages of 100 (intended for institutional use only)

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...in the functional bowel/irritable bowel syndrome*

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helps control abnormal motor activity
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Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy), obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis), paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis, myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DDSAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine[®] (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

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Chiropractic Services Are Criticized

The Carter administration has recommended that chiropractic benefits in Medicare and Medicaid be eliminated "in the absence of scientific evidence that chiropractic services either improve or maintain health status."

According to the Department of HEW, elimination of chiropractic services would save the government programs \$35 million next fiscal year.

The recommendation brought an immediate reaction from the American Chiropractic Association. In a full page "Open Letter to the President" advertisement in the *Washington Post*, the association said President Carter acted on "poor advice" in asking "that a vital service be eliminated."

Carter Studies NHI Proposal

An NHI proposal has been submitted to the White House by HEW, but President Carter is expected to take his time in deciding what form the Administration's national health insurance plan will take. Carter wants to test the sentiment on Capitol Hill before submitting his plan, which probably won't be issued until spring. The White House is not committed to the HEW approach and may make major changes in it.

The HEW proposal would establish a new federal insurance program called HealthCare that would operate alongside the existing private insurance plans, which would be required to meet new federal standards. The plan is understood to provide various reimbursement options, including prospective payment for hospitals and fee schedules for physicians.

Financing would be through a combination of premiums and federal general revenues. The "National Health Plan" would be phased in over a period of five years, with a catastrophic benefit the first phase. A key issue is whether the Administration will seek to have Congress approve the entire plan in one package or propose that Congress act on each phase.

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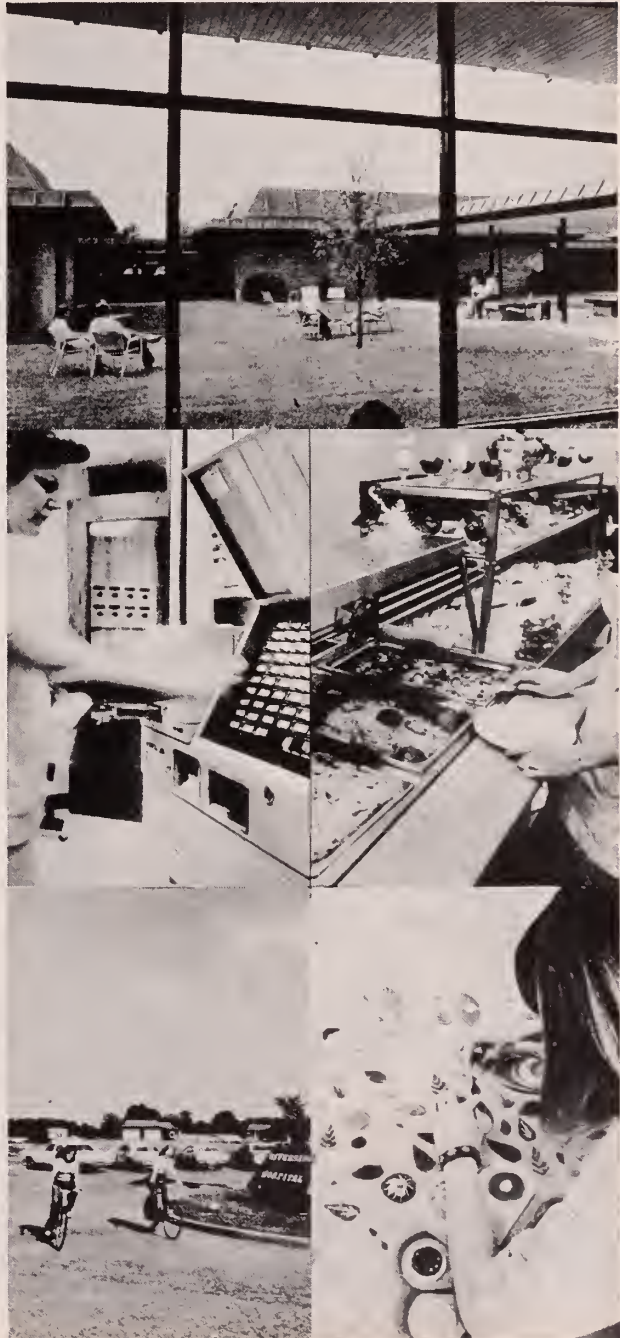
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For additional information contact: John R. Reedy, Executive Director.

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ORIGINAL PAPERS

Neurosurgical Management of Endocrine Dependent Neoplasms

ANDREW D. PARENT, M.D.

Jackson, Mississippi

THE CONCEPT that carcinoma might respond to endocrine manipulation was first proposed by Beatson in 1896 when he reported that two patients with advanced breast carcinoma had clinical remissions after oophorectomy. Modifying the hormonal milieu on several endocrine target organs with cancer was attempted in the ensuing years. Castration was seen to be of variable effectiveness, especially in breast and prostate cancer. It was then suggested that further hormonal alterations could be obtained by either adrenalectomy or hypophysectomy.

It was not until the early 1950's that major endocrine ablation became practical and relatively safe with the availability of synthetized replacement cortisone. Hypophysectomy for metastatic carcinoma was performed entirely via the transcranial route in these initial series. While definite palliative effects were noted by this procedure, the operative approach was in many cases considered too extensive for patients with advanced cancer.

For this reason, alternative extracranial approaches for hypophysectomy were developed. Radioactive yttrium implantation into the sella via transsphenoidal stereotaxic approach produced partial destruction of the pituitary, but required a significant period of time to achieve pituitary destruction and was associated with occasional damage to the optic and oculomotor nerves. Because of the relative resistance of the normal pituitary gland to conventional radiation, external radiation was considered neither practical nor effective. Cryohypophysec-

tomy was introduced in 1964, and utilized successfully in the destruction of the pituitary gland by freezing. In large series, this technique provided

Transsphenoidal hypophysectomy is associated with remissions in patients with metastatic carcinoma of the breast and prostate when the neoplasm is hormonally dependent. The indications for selecting these patients, including their preoperative evaluation, have been reviewed. The author's results indicate that transsphenoidal hypophysectomy can play a beneficial palliative role in the patient with metastatic disease from prostate or breast cancer.

good results, but the normal gland was not consistently destroyed. Similarly, radio-frequency lesions have resulted in incomplete destruction of the pituitary gland as demonstrated by endocrinological postoperative evaluation. The modern day technique of transsphenoidal hypophysectomy was refined by Hardy.³ With improved instrumentation as well as the magnification and illumination of the operating microscope, a complete removal of the gland with considerable less morbidity and mortality has been documented.

Indications for Surgery

Hormonal therapy has a considerable advantage over radiotherapy or chemotherapy in that it does not significantly damage normal tissue. However, in

From the Department of Neurosurgery, University of Mississippi Medical Center, Jackson, MS.

NEOPLASMS / Parent

patients with advanced disease, only 30% will show a clinical response of any hormonal manipulation. Even at this time there is still no specific predictive test for identifying with a high degree of reliability those patients who would not benefit from hormonal therapy.^{5, 6} In premenopausal breast cancer patients the preferred initial therapy is oophorectomy, which induces remission in 30% to 40%. In some series the presence of osseous metastasis has been associated with a better chance of response of endocrine ablation, but this has not been a consistent finding. In prostate cancer patients, a response to orchidectomy has been associated with a 40% incidence of hormone palliation.

A specific binding protein termed estrogen receptor present in the cell cytoplasm has been shown to cause the uptake of estrogen by target tissues.² The response rate with hormonal treatment is approximately 65% in the receptor positive patients whereas only 7% of receptor negative patients respond. This receptor assay is, therefore, most useful in excluding the receptor negative patients from hormonal therapy and the complications and lack of benefit of endocrine treatment. The free interval, that is the time between tumor diagnosis and the development of disseminated disease, has been utilized as an index of the relative aggressiveness of the neoplasms. Prolonged free intervals have been noted to be documented in patients with high response rates to endocrine ablation as well as longer durations of remissions. The presence of symptomatic vital organ disease as intracranial metastasis, liver metastasis with impaired liver function tests, pulmonary metastasis with disabling symptoms, and severe myelophthitic anemias are noted to be indicators of poor responsiveness to hormonal manipulation (see Figure 1).

RELATIVE POSITIVE PREDICTORS OF RESPONSE

1. Previous response to hormonal manipulation
2. Osseous metastasis
3. Tumor positive for estrogen receptor sites

Figure 1

Preoperative Evaluations

A standardized preoperative evaluation protocol (see Figure 2) has been advocated in evaluating these patients.⁹ Skull x-rays with particular emphasis on coned-down views of the sella turcica are of value in ruling out metastatic lesions to this area. Formidable

technical difficulties are encountered with attempted hypophysectomy in sellas with metastatic disease. A CT scan to rule out intracranial metastasis should also be done on these patients since a much higher incidence of CSF leaks has been noted in patients with intracranial metastasis. Radionuclide bone scans are usually performed to objectively document the preoperative extent of metastatic disease. Base line endocrine studies as well as liver function studies are also obtained.

PREOPERATIVE EVALUATION

1. Skull x-ray
2. C.T. scan
3. Bone scan
4. Baseline endocrine studies

Figure 2

Operative Procedure

The operative procedure is performed utilizing general anesthesia. A small incision is made at the upper gingival margin and a unilateral submucosal dissection is performed along the nasal septum. A special nasal speculum is utilized to further assist in dissection of the nasal mucosa, and by its opening causes a fracture at the cartilaginous vomer synchondrosis. The speculum is now centered directly over the vomer and anteriorly is in contact with the wall of the sphenoid sinus. The vomer and anterior wall of the sphenoid sinus is then removed. The floor of the sella turcica is either identified grossly or radiographically. Utilizing the operating microscope, the sella floor is removed, and the dura over the pituitary is incised. Great care is taken not to extend the dural incision into the circular sinus. The superior surface of the pituitary is mobilized until the pituitary stalk is identified. The stalk is sectioned approximately 1 to 2 mm from the pituitary gland. The pituitary is then removed in one piece. The empty sella is now filled with adipose graft removed from a left lower quadrant abdominal incision. This fat is held in place by a cartilaginous strut placed in the opening of the floor of the sella. Surgicel is then bonded over this opening with further adipose tissue being placed in the sphenoid sinus. The speculum is removed and a few absorbable sutures are placed in the infralabial mucosa. Soft nasopharyngeal airways are inserted and kept in place for 24 hours.

Pre- and Postoperative Management

Prior to surgery these patients have 100 mgs of hydrocortisone administered intramuscularly as well as 1 gm of Ampicillin. In the immediate postopera-

tive period, hydrocortisone is administered 50 mgs every 8 hours until the 48 hour period when it is tapered to a maintenance level. The adequacy of replacement therapy is indirectly monitored by obtaining lying and standing blood pressure, and thereby determining the presence of orthostatic hypotension. Diligent observation of hourly intake and output with specific gravity measurements are obtained to detect diabetes insipidus. If the urinary output exceeds the total intake by 250 ml in any 1 hour period or 100 ml in any 4 hour period, or if the specific gravity is less than 1.002 for 2 consecutive hours, further laboratory studies are obtained. These include serum osmolality and urine osmolality and serum sodium. If clinical dehydration is determined to be present and laboratory studies confirm the presence of diabetes insipidus, Pitressin Tannate is administered. Diabetes insipidus is usually a transient problem and fluid loss not compensated by the thirst mechanism, can be controlled by clofibrate (Atromid-S) 500 mgs every 6 hours. Thyroid replacement is not usually necessary until the sixth week after surgery (see Figure 3).

POSTOPERATIVE MANAGEMENT

1. Corticosteroid Replacement
 - A. Tapering schedule of hydrocortisone to maintenance levels
 - B. Lying and standing blood pressure determination
 - C. Patient instruction to increase dose in time of severe physical or traumatic stress
2. Fluid Balance
 - A. Daily weight and hourly I & O with specific gravity
 - B. Serum and urine osmolality and serum sodium determinations if D.I. is suspected
 - C. Treatment initially by pitressin tannate
 - D. Incomplete D.I. treated by clofibrate
3. Thyroid Replacement
Usually 4-6 weeks after surgery

Figure 3

Remission

Objective remission is defined as a diminution of tumor lesion size, calcification and healing of osteolytic metastasis, the absence of the development of any new lesions, and the persistence of these changes for a period of 3 to 6 months. Subjective remissions as demonstrated by the relief of pain documented by decreased use of analgesics, gain in weight, as well as improvement in appetite and anemia, are noted in upwards of 80% of these patients (see Figure 4). The relief of intractable pain is an immediate response from hypophysectomy and is

often noted by the patient on awakening from anesthesia. This immediate relief of pain has been noted by incomplete hypophysectomy by simple instillation of alcohol into the sella turcica as well as by radiotherapy and cryotherapy, but is not commonly seen in patients treated with adrenalectomy. This suggests that the diminution in bone pain is not mediated endocrinologically by complete ablation of any one hormone. In these patients, endorphins may have an important role in the mediation and perception of bone pain.⁴

CRITERIA OF REMISSION

- A. Objective Remission
 1. Diminution of tumor lesion size
 2. Calcification and healing of osteolytic metastasis
 3. Absence of new lesions
 4. Response lasting for 3-6 months
 - B. Subjective Remission
 1. Relief of pain (decrease use of analgesic)
 2. Gain in weight
 3. Improvement in appetite
 4. Improvement of anemia
-

Figure 4

Complications

Complications relating to transsphenoidal hypophysectomy include diabetes insipidus, either transient or prolonged, cerebral spinal fluid rhinorrhea, graft incision infections as well as oculomotor or optic nerve impairment. In patients who fail to take replacement hydrocortisone, chronic adrenal insufficiency can be anticipated. Mortality rates for hypophysectomy have ranged from 1% to 4%, but most of these reflect patients dying within the month of surgery as a result of their primary disease and not the surgery itself.¹⁰

Results

In patients with breast carcinoma, pain relief is documented in over 80% of patients after hypophysectomy, and up to 50% of patients will demonstrate objective signs of remission.¹ In prostate carcinoma, on the other hand, 90% of these patients will demonstrate pain relief initially and about 35% of these patients may have objective remissions.⁷ These results are obviously contingent upon patient selections.

The survival period has not been significantly extended in patients with prostate carcinoma, even though they may demonstrate initially an objective remission and have significant pain relief throughout their clinical course. However, in patients with

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breast carcinoma a mean survival period of 15 to 20 months post hypophysectomy has been documented.^{8, 9}

Summary

Transsphenoidal hypophysectomy is associated with remissions in patients with metastatic carcinoma of the breast and prostate when the neoplasm is hormonally dependent. The indications for selecting these patients, including their preoperative evaluation, have been reviewed. In these selected patients 80% to 90% will have a subjective remission with relief of pain from metastatic sites. Fifty to 60% will obtain objective remissions with an extended quality survival period of their life. These results indicate that transsphenoidal hypophysectomy can play a beneficial palliative role in the patient with metastatic disease from prostate or breast cancer.

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RX FOR LITIGATION

A secretary in the offices of a group of anesthesiologists has written a letter which may serve as a model of how to put a patient into a mood to sue — or worse.

The letter, reprinted by the St. Paul Fire and Marine Insurance Co., was sent to a patient who had complained of the fee. None of the doctors saw the note before it was sent. Its final paragraph suggested that the "alternative for (such) dissatisfied patients as yourself is to request no anesthesia for future surgeries."

The insurance company offered it as "an example of why physicians must be critically aware of the activities which take place in their front office."

Radiologic Seminar CLXXXIX: Traumatic Pelvic Hemorrhage Controlled by Embolization

PHILIP E. CRANSTON, M.D.

Jackson, Mississippi

MASSIVE HEMORRHAGE can occur with pelvic fractures. This may cause death from exsanguination. The bleeding can be arterial or venous. Only fairly recently has arterial bleeding been pinpointed as the culprit in many cases. Surgical treatment is fraught with technical difficulties and failure when only proximal ligation is utilized. Angiography can be used for identification of the bleeding site, and therapeutic embolism can be performed through the catheter to arrest the hemorrhage.²⁻⁵

Case Report

A 66-year-old black male was admitted following a motor vehicle accident. He had sustained multiple pelvic fractures. A cystogram demonstrated marked compression and elevation of the urinary bladder by adjacent hematoma (see Figure 1). Despite transfusions, his hematocrit would not stabilize and decreased. This was complicated by a shortage of the patient's type blood. Emergency angiography was performed with identification of the patient's bleeding site at the left obturator artery (see Figures 2A & 2B). Embolism was performed using Gelform mixed with contrast medium. The post-embolism angiogram showed no evidence of hemorrhage (see Figures 3A & 3B). Following angiography, the patient had no further evidence of bleeding with the hematocrit remaining stable, and no more transfusions were required.

Discussion

Therapeutic embolization is not new to interventional radiologists, i.e., those who enter into treatment of the patient. In the 1960's, it became popular to infuse vasopressin intra-arterially for G-I hemorrhage control. Using embolism with autologous clot

for G-I bleeding was first reported by Röscher, Dotter and Brown in 1972. Gelform (absorbable gelatin sponge) was first reported in use for arterial embolism about 1974. Embolism has been used in many cases now, ranging from treatment of nosebleeds to treatment of hyperparathyroidism.¹

Margolies et al were the first to report on arteriography in the management of hemorrhage from pelvic fractures in 1972.³ They point out the difficulty of making the diagnosis clinically and that due to lack of recognition, massive extraperitoneal hemorrhage is the leading cause of death after pelvic fracture. They note surgery has been so disappointing that a recommended procedure has been to transfuse until bleeding stops. They attempted control of bleeding with vasopressin initially; however, when this failed, they embolized with clot successfully.



Figure 1. Cystogram shows large hematoma elevating and compressing the bladder. Multiple pelvic fractures are present. Note broad fracture outlined by arrows at the left pubic bone.

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From the Department of Radiology, University of Mississippi
Medical Center, Jackson, MS.

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Multiple agents are being used for embolism, ranging from autologous clot to mechanical steel wool devices. Presently the agent most used is gel-foam mixed with contrast medium.¹ There are different materials available for temporary or permanent occlusion (gelfoam is absorbed in 30-45 days). The bleeding site in the pelvis is related to the region of fracture. With pubic fracture the obturator artery is most often injured but bleeding can occur from the internal pudental artery. Sub-selection of the precise bleeding vessel is not necessary since the entire hypogastric artery can be obstructed without ill effects. There is, in addition, apparent preferential flow of embolized material toward the bleeding site, presumably due to lower resistance.⁴

Possible complications should be kept in mind by both the radiologist and clinician. The patient with multiple injuries from a motor vehicle accident

should be kept in the radiology department as short a time as possible. Contrast media administration should be kept at the minimum for an adequate examination to avoid renal failure problems inherent with angiography. The better known complications with angiography in general do not need reiteration. Specifically, with therapeutic embolism of the hypogastric artery, the remote possibility of urinary bladder necrosis must be considered. In addition, if the injected material refluxes out of or dislodges from the intended vessel, inadvertent embolism will occur.¹ Skin necrosis and hindquarter paralysis have been produced in experimental animals on embolism of the hypogastric artery with particulate material. Cyst and abscess formation have been reported with therapeutic embolism to various abdominal organs. Pain which was severe enough to require treatment has developed with the infarction in some cases. ★★★

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Figure 2A. Demonstrates the extravasation of contrast medium at the superior ramus of the left pubic bone indicating hemorrhage from the left obturator artery. This density was not present on the scout film and persisted in the venous phase.



Figure 2B. A close-up view. Arrows point to the extravasation.



Figure 3A. The post-embolism status. The branches of the obturator artery are abruptly occluded. No evidence of hemorrhage is present.

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Figure 3B. A close-up view. Closed arrows point to the occluded arteries. The open arrow shows where the previous bleeding was seen.

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“Breathing Easy,” a new manual for patients with chronic obstructive pulmonary disease, is available as a Christmas Seal service from the Mississippi Lung Association, P.O. Box 9865, Jackson, MS 39206. The 32-page booklet is designed to provide patients information on emphysema and chronic bronchitis and provides physicians with an excellent tool for instructing patients about their condition.

The Thyroid Lump — To Cut or Not to Cut

WILLIAM C. NICHOLAS, M.D.
Jackson, Mississippi

A THYROID ADENOMA is nothing more than a palpable lump in the thyroid. But not all lumps are adenomas — some are cystic while others are inflammatory. The term “lump” covers them all.

If you believe that all lumps in the thyroid are potentially malignant and should be removed, then read no further — it could be a waste of your time.

Let's look at what is known. Two facts are important: first, thyroid lumps are common, occurring in about 5% of the population between ages of 30-59;¹ second, thyroid cancer is rare, occurring in approximately 2 per 100,000 population.²

The patient will present to you with either symptoms of pain, hyperthyroidism, hypothyroidism or be asymptomatic. In the later case the lump will be “noticed” by the patient or found by the physician.

The first question that will go through a physician's mind when seeing a thyroid lump is whether it is benign or malignant. The history will be helpful. Certain features will strongly suggest cancer; others will strongly favor the lump being benign. Always place cancer at the top of your list if history reveals the following:

1. Prior history of radiation therapy to face, neck or upper chest.³
2. Age of less than 20 years (especially if male).
3. Steady and painless growth (especially if it continues while patient is on thyroxine suppressive therapy).
4. If there is associated voice change or dysphagia.

The lump is likely to be benign if:

1. It has developed rapidly (especially if pain is present).
2. If it has been present and unchanged for at least 10 years.

Family history is helpful only if it is positive for medullary carcinoma of thyroid, in which case all lumps should be considered malignant and investigated further.⁴

The physical examination is helpful. Cancer should be strongly considered if:

1. The thyroid gland is stony hard (especially if it is fixed).
2. If adjacent lymph nodes are involved.

Thyroid adenoma is not uncommon and still presents a diagnostic challenge to the physician. Not all thyroid lumps are adenomas, and the author's approach emphasizes those areas of importance to the clinician. Emphasis is placed on medical versus surgical management where it seems appropriate. A management plan is outlined.

Now time for some problem solving — what could be causing the lump? Non-neoplastic causes are likely hyperplasia, inflammation or cyst. Neoplastic causes are either benign or malignant papillary or follicular adenomas. Medullary carcinoma and anaplastic carcinomas are rare and comprise less than 15% of all thyroid cancer.⁵

As we move into the phase of investigation, there are four important points to remember:

1. Radioactive iodine uptake studies depend on whether thyroid tissue is responsive to thyroid stimulating hormone (T.S.H.).
2. Thyroid lumps which do not take up radioactive iodine are most likely malignant, inflamed or cystic.
3. Ultrasound is excellent in diagnosing cystic lumps;⁶ if the lump is cystic, the chances are it is benign.⁷
4. A sample of thyroid tissue or thyroid cells is helpful when more information is required.⁷

We are now in a position to map out a plan when a suspicious lump has been identified. A flowsheet (Figure 1) will be helpful; more could be added, but is kept simple to highlight the essential points.

From the Department of Medicine, University of Mississippi Medical Center, Jackson, MS.

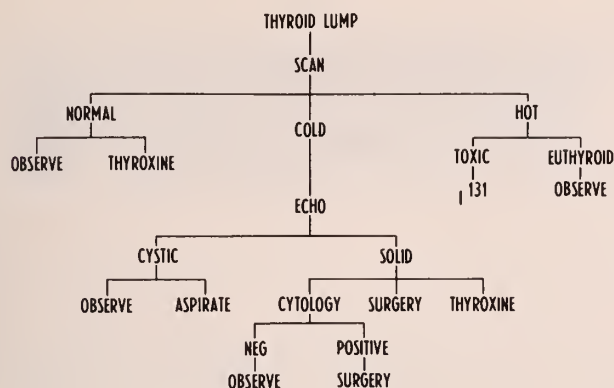


Figure 1

These essential points are: (1) If a patient is thyrotoxic, surgery is usually out of the question, and radioactive iodine therapy is the treatment of choice. (2) If there is a prior history of radiation to neck or face, the incidence of cancer is higher and surgery is appropriate.⁸ (3) If the lump is painful and of recent onset, the chances of hemorrhage into a cyst is excellent; and the scan will likely reveal the area to be cold. Keep in mind that a localized thyroiditis could show a similar change on scan. However, aspiration of the lump will help solve this dilemma. Any fluid aspirated should be placed in a heparinized tube and sent for cytological examination.

After the initial screening test, you will probably be left with a patient who has a solid nodule which may or may not take up radioactivity. The more radioactivity the nodule can accumulate the less chance of malignancy since this indicates that the tissue is responsive to normal T.S.H. control mechanisms. The therapeutic implications of this is evident, since as T.S.H. production is suppressed, the benign thyroid lumps should shrink or stop growing. In fact, this is the case in the majority of benign lumps.⁹

The question arises as to which approach one should follow when the lump is solid and cold or variations thereof. Even the experts are divided in their approach to the very cold solid nodule. Some recommend a three to six month trial of thyroxine suppression therapy, which is continued indefinitely if the lump shrinks or at least stops growing. Considering the benign nature of most all thyroid cancer, this approach is not unreasonable.⁵ The majority, however, follow a more cautious approach, where depending on the clinical setting, either removal or further assessment by obtaining tissue or cells for examination is indicated. The incidence of cancer in

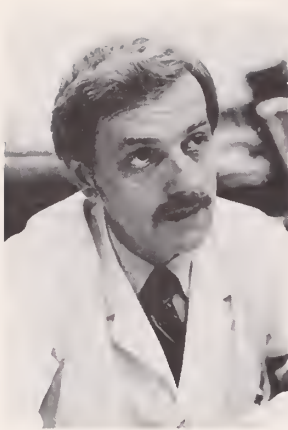
cold lumps is approximately 10%. The extra information obtained by biopsy or aspiration may influence one's decision regarding surgery, and for this reason I have been doing more of these lately. I prefer small needle aspiration as described by Wal-fish.⁷ It is essential to have a willing pathologist who is interested and knowledgeable in this area. Certainly positive or suspicious cytology will lead one directly to surgery, whereas negative cytology will encourage one to try a course of thyroxine suppressive therapy and observe the results. If any thyroid lump grows while patient is on thyroxine suppression therapy, it should be considered malignant, and removed.

There are several approaches to the management of thyroid lumps. Some physicians, even after reading this article, will still believe the proper approach is primarily surgical with the removal of all thyroid lumps — as we have no absolute proof that they are benign. Some physicians will treat all lumps without clinical features of malignancy as benign — as we have no absolute proof that they are malignant. The enlightened physician will use resources available to categorize patients into appropriate high or low risk groups. The management plan will thus be based on the factual information available. With this knowledge, the doctor and the patient can decide on the most appropriate plan of management. ★★★

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The President Speaking

Who Will Do the Rationing?

CARL G. EVERS, M.D.
Jackson, Mississippi

The AMA's Annual Leadership Conference was recently held in Chicago and, as might be expected in these inflationary times, the cost of health care was a prime topic.

A parade of national business, political, economic, and medical authorities appeared at the conference and in one way or another expounded on the problem of increasing medical costs — hospital costs have increased at twice the general inflation rate; total health costs approach 10 per cent of the gross national product; polls indicate that people are deeply concerned about their ability to pay for a serious illness, etc.

Also, there were reports on efforts to respond to the health cost crisis — the voluntary effort to control hospital costs, HMOs, second opinion programs, PSROs and health planning, etc.

It seemed, however, that one critical aspect of health care costs that no one at the conference wanted to address was demand. Perhaps this is understandable. We are most comfortable with the idea that demand is usually determined by the impersonal market place and factors such as supply and price. Furthermore, it works.

Health care and health care costs have come out of the market place into the political arena, however, and the ambivalence of the new setting is obvious. Medicare and Medicaid were enacted (at the time) to put the aged and indigent into the "mainstream" of medical care — and such care was to be "free." National Health Insurance is now being sold to the public on the idea of providing "free" care to all — and at the same time controlling health care costs.

Health planning vis-a-vis the National Health Planning and Resources Development Act passed by Congress in 1974 is to improve access to health care — and at the same time control health costs.

PSRO has as its goal improving the quality of medical care — and at the same time determining the necessity for medical care.

One could go on, but the point can be made that no one seems to be willing to tell the public that the more health care you demand, the more it costs; what we are really up against is how to ration health care and who will do the rationing.

Normal market forces of supply, demand and price won't work because, among other reasons, health care is now a "right." Politicians won't ration health care because no politician can say "no." Physicians are trained to bring to bear every resource to cure illness rather than to decide who will get what. Consumers want more, not less. So, the question is, "Who will do the rationing?"

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Defensive Medicine in the Emergency Room

It once was true that the injured patient coming into an emergency room relied on a careful examination and the mature judgment of the ER physician in determining the extent of injury. Laboratory tests and x-rays were ordered as indicated and justified. Such treatment was, of course, prior to the time the name of the game was "Sue the Doctor." Now, many patients present to the emergency room *after* having seen their lawyers, and some are even accompanied by their attorney. The ER physician is immediately put on the defensive. Even though there is no clinical evidence of severe injury, the physician's orders may well read, "X-ray Everything That Hurts." Otherwise, this same doctor, at some later date, may have to explain on the witness stand why he missed that hairline fracture of the ankle.

The Feds are constantly harping on the increasing cost of medical care, with attempts being made to legislate health cost containment. Conversely, plaintiff lawyers are suing doctors for millions of dollars for alleged errors of omission. One can readily see who is caught in the middle.

Until patients realize that doctors cannot guarantee a perfect result every time, and the courts strike the often enormous awards to the plaintiff, the physician's only recourse is defensive medicine at an increased cost.

GEORGE H. MARTIN, M.D.
Associate Editor
Vicksburg, MS

Medico-Legal Brief

\$1,500,000 Awarded for Brain Damage

A hospital, a surgeon and a chief anesthesiologist were liable for \$1,500,000 in damages for brain injuries suffered by a patient during preoperative administration of anesthesia, a Pennsylvania appellate court ruled.

The patient was admitted to the hospital on May 19, 1969, for elective surgery on her submaxillary

gland. Endotracheal intubation was used to anesthetize her. Intubation was difficult and was completed after two attempts by a resident in anesthesiology and then two more attempts by a staff anesthesiologist, about 20 minutes after induction.

About five minutes after intubation, the patient's surgeon noticed that she was cyanotic. The chief anesthesiologist entered the operating room after he heard that aminophylline was requested. He worked on the patient for five minutes, during which time the surgeon left the room.

After five minutes, when the anesthesiologist was preparing to check placement of the endotracheal tube, the patient suffered a cardiac arrest. He immediately removed the tube and the surgeon began external heart massage. Her skin color and heartbeat returned to normal but she had already suffered permanent brain damage.

Expert testimony indicated that the patient was unable to get oxygen because the tube had either been placed in her esophagus or it had kinked in her trachea.

She and her husband filed suit against the hospital, the surgeon, the chief anesthesiologist and four other physicians. A jury returned a verdict of \$1,000,000 for the patient's husband and \$500,000 for the patient. The resident was found not negligent. The hospital, the surgeon, and the chief anesthesiologist were found negligent.

Affirming the decision, the appellate court said that the evidence supported the verdicts against the hospital and two physicians on theories of personal negligence and negligence for the acts of others. The \$1,000,000 award to the husband was not excessive or otherwise unreasonable, the court said.

There was sufficient evidence to find the surgeon's conduct to have been a proximate cause of the patient's injuries, the court said. At the trial, an expert testified that the surgeon should have given orders to cancel the anesthesia attempts when it was apparent that the progress of these attempts was not satisfactory. — *Schneider v. Albert Einstein Medical Center, Northern Division*, 390 A.2d 1271 (Pa.Super.Ct., July 12, 1978)

PERSONALS

HORACE H. BAGGETT has joined the Pediatric Clinic, P.A., located in the Medical Plaza in Hattiesburg.

WILLARD A. BARNES announces the opening of his office for the general practice of medicine at 132 N. Wells Street in Kosciusko.

GLENN BENNETT of Tishomingo announces the relocation of his office for the practice of medicine to Baldwin, in association with VERNON CHASE.

Jackson Bone and Joint Clinic announces the association of KENDALL T. BLAKE for the practice of orthopedic surgery.

RICHARD C. BORONOW, outgoing president of the Society of Gynecologic Oncologists, addressed the tenth annual meeting of that group in January at Marco Island, FL. His associate, JOHN P. MLADINEO, also attended, and LEON E. PARKS of UMC presented a paper.

BERNARD BLUMENTHAL of UMC presented a paper at the Southern Radiological Conference in Point Clear, AL, in January.

Upon his retirement, R. H. BOSTWICK, JR. of New Albany received a commemorative plaque in recognition of service and dedication to Union County and Union County General Hospital.

LEMANN BOUNDS of Meridian announces his retirement from eye, ear, nose and throat surgery.

JON C. CAMPBELL announces the opening of his office for the general practice of family medicine at 140 Jefferson Davis Boulevard in Natchez.

A. W. CONERLY of Jackson and UMC attended a January meeting of the National Board of Respiratory Therapy in Kansas City.

JAMES W. COOK has associated with CURTIS D. ROBERTS, McLaurin Medical Center in Pearl, for the practice of family medicine.

FRANK COVINGTON, JR. of Jackson and Meridian was appointed to the State Corrections Board by Governor Finch.

FRED A. CRAWFORD, JR. and GASTON R. RODRIGUEZ, both of Jackson, have been named fellows of the American College of Cardiology.

MICHAEL DALY, a Birmingham, AL native, has opened an office for the practice of obstetrics and gynecology at the Doctor's Park offices in Houston.

DAVID A. DEBESSONET has opened an office at 310 S. Dauphine Street in Poplarville for the practice of urology and urological surgery, with office hours on Tuesday and Thursday.

The Merit Award of the North Mississippi Emergency Medical Services Authority went to JOHN D. DYER of Houston.

CARL EVERS of Jackson and UMC represented the Association of American Medical Colleges at the Association of University Professors of Ophthalmology meetings on postgraduate training programs held in Port St. Lucie, FL.

The American Board of Family Practice announces that CHARLES ALLEN OZBORN of Eupora and KENNETH R. W. WARREN of Picayune have been certified as diplomates. A. M. PHILLIPS of Moorhead has been recertified as diplomate by the ABFP.

WILLIAM R. GREENE has associated with GERALD H. HARPER and HUGH W. STANCILL, III of the Ob-Gyn Group of Laurel, for the practice of obstetrics and gynecology.

LES HAMMACK joined the staff at Calhoun County Medical Facility in January, for the general practice of medicine and emergency room coverage.

JAMES HARDY, surgery chairman at UMC, attended the midwinter council meeting and the president's dinner of the American Surgical Association in Rochester, MN.

HARPER HELLEMS was in New Orleans for the annual Louisiana-Mississippi regional meeting of the American College of Physicians in January.

The Field Clinic and the Liberty Medical Clinic announce the association of JACK NOBLE and JOSEPH HUMBLE. Dr. Humble will be at the clinic every morning, and Dr. Noble will be there on Wednesday afternoons.

JOHN JACKSON of UMC presented a paper at the January meeting of the Southern Society of Clinical Investigation in New Orleans.

B. THOMAS JEFFCOAT has associated with WILLIAM H. MEYER for the practice of orthopedic surgery at the McComb Orthopedic Clinic, P.A., Medical Arts Building, Suite 400, McComb.

EDLEY JONES of Vicksburg was recognized by the legislature for many years of service as "doctor of the day." He was presented to the Senate by Sen. Ellis Bodron and to the House of Representatives by the Warren County delegation.

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Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but only clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

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A. VICKIE KULIK has opened an office at the Hinds Professional Building in Jackson for the practice of child, adolescent and adult psychiatry.

HERBERT G. LANGFORD, UMC professor of medicine, attended a scientific program committee meeting of American Heart Association in Dallas.

JOSEPH RILLENS LEE announces the opening of his surgery clinic at 304 North 2nd Street in Bay St. Louis.

MYRON LOCKEY of UMC attended a January meeting of the Southern Section, Triological Society, in Boca Raton, FL.

ELLIS MOFFITT of Jackson testified before a legislative subcommittee in support of the MSMA-endorsed bill permitting the use of generic drugs in filling prescriptions.

FRANCIS MORRISON, recently elected to the Executive Committee of the American Association of Cancer Education, presented a talk entitled "The Use of Blood Components in Transfusion Therapy" to the Mississippi-Louisiana Section of the American College of Physicians' January meeting in New Orleans.

JOE R. NORMAN of Jackson, president of the Mississippi Thoracic Society, attended the 23rd annual Tri-State Thoracic Consecutive Case Conference in January at Biloxi, along with speakers DEWEY H. LANE of Pascagoula, A. JERALD JACKSON and CHARLES PARKMAN, both of Hattiesburg, and JOHN D. MORGAN of McComb, who served as moderator for the Mississippi session. WILLIAM A. NEELY of Jackson and UMC also attended the conference.

ANTONY RALLING has opened a practice limited to surgery at the Pontotoc Community Hospital.

SUTHIN SONGCHAROEN, specialist in arthritis and rheumatic disease, has opened an office at the Medical Tower Building in Jackson.

J. TATE THIGPEN, assistant professor of medicine at UMC, attended the national business meeting of the Gynecologic Oncology Group in Miami.

WILLIAM WALLACE of UMC attended a meeting of the American Society for Aesthetic Plastic Surgery in Lake Tahoe, NV. Dr. Wallace recently won a special merit award in the Kodak International Newspaper Snapshot contest.

ELBERT A. WHITE, III will practice ophthalmology at Magnolia Hospital Doctors' Plaza in Corinth.

NEW MEMBERS

CHAUVIN, RUSSEL GEORGE J., Picayune. Born Windsor, Ontario, Canada, June 2, 1934; M.D., University of Ottawa Faculty of Medicine, Ottawa, 1963; interned Detroit Memorial Hospital, Detroit, MI, one year; surgery residency, same, 1964-68; elected by Pearl River Medical Society.

DANGLE, HARLAND CLARENCE, Grenada. Born Baraboo, WI, July 13, 1920; M.D., Medical College of Wisconsin, Milwaukee, 1944; interned St. Agnes Hospital Foundation, Dulac, WI and Gardner General Hospital, Chicago, IL, 1944-45; pathology residency, Wood V. A. Hospital, Milwaukee, 1947-51; elected by North Central Medical Society.

HADJIALEXANDROU, A. G., Canton. Born Cyprus, Jan. 10, 1947; M.D., Faculty of Medicine National University of Athens, Athens, Greece, 1973; interned, same, one year; pediatric surgery residency, Athens, Greece Childrens Hospital, 1973-75; surgery residency, Athens University General Hospital, 1975-76; elected by Central Medical Society.

HASSELLTINE, HANLEY E., Jackson. Born Corinth, MS, April 20, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned UMC, Jackson, one year; otolaryngology residency, same, 1975-78; elected by Central Medical Society.

JOHNSTON, WALTER E., Vicksburg. Born Vicksburg, MS, Jan. 6, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned and family medicine residency, Spartanburg, SC, 1974-77; elected by West Mississippi Medical Society.

MILES, BRENDAN MATHEW, Amory. Born New Orleans, LA, Nov. 10, 1938; M.D., Louisiana State University School of Medicine, New Orleans, 1967; interned Confederate Memorial Medical Center, Shreveport, LA, one year; radiology residency, same, 1968-71; elected by Northeast Mississippi Medical Society.

MYRICK, ANDREW JACKSON, JR., Amory. Born Water Valley, MS, Mar. 21, 1946; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned Queen's Medical Center, Honolulu, HI, one year; surgery residency, Ochsner Hospital, New Orleans, LA, 1974-78; elected by Northeast Mississippi Medical Society.

PARENT, ANDREW DENNIS, Jackson. Born St. Alban's, VT, Mar. 18, 1944; M.D., University of

NEW MEMBERS / Continued

Vermont College of Medicine, Burlington, 1970; interned University of Texas, Galveston, one year; neurosurgery residency, Emory University, Atlanta, GA, 1974-78; elected by Central Medical Society.

PINKLEY, LEONARD F., JR., Amory. Born Cape Girardeau, MO, July 4, 1944; M.D., University of Alabama School of Medicine, Birmingham, 1971; interned University of South Alabama, Mobile, one year; ob-gyn residency, same, 1974-75; elected by Northeast Mississippi Medical Society.

RUSSELL, JOHN BURTON, Pontotoc. Born Tupelo, MS, Oct. 22, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned Confederate Memorial Hospital, Shreveport, LA, one year; surgery residency, 10 month, same; elected by Northeast Mississippi Medical Society.

SHIRLEY, JAMES H., Tupelo. Born New Hebron, MS, Dec. 12, 1932; M.D., Louisiana State University School of Medicine, New Orleans, 1963; interned Wilford Hall USAF Medical Center, Lackland AFB, TX, one year; general surgery residency, same, 1964-69; thoracic surgery residency, same, 1969-71; elected by Northeast Mississippi Medical Society.

DEATHS

GASTON, CECIL LORRAIN, JR., Meridian. Born Enid, OK, Aug. 10, 1911; M.D., Louisiana State University School of Medicine, New Orleans, 1936; interned Charity Hospital, New Orleans, one year; Emeritus member of MSMA and AMA; died Nov. 14, 1978, age 67.

MULLINS, CHARLES E., Meridian. Born Corbin, KY, Feb. 8, 1934; M.D., University of Alabama College of Medicine, Birmingham, 1964; interned Lloyd Noland Hospital, Fairfield, AL, one year; radiology residency, Baptist Medical Center, Birmingham, AL, 1970-73; died Dec. 30, 1978, age 44.

POSTGRADUATE CALENDAR

Mar. 16-17, 1979

RENAL UPDATE FOR THE HEALTH PROFESSIONAL
Holiday Inn Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Medicine, the University of Mississippi School of Nursing and the University Medical Center Division of Continuing Health Professional Education.

Coordinator: John D. Bower, M.D., professor of medicine, University of Mississippi School of Medicine, and director of the artificial kidney unit, University Hospital.

The seminar is a joint offering for primary care physicians and registered nurses. Sessions for the physician will center on treatable and reversible renal diseases, including interpretation of procedures and tests needed for diagnosis, and the mechanisms of reversible disease processes, and therapeutic measures for management. The course will review recent developments in peritoneal dialysis and its impact on renal care. Fee: \$45.00. Credit: 11 contact hours, 1.1 CEU, Category I of the Physician's Recognition Award, AMA.

Mar. 21, 1979

UPDATE ON CHRONIC PAIN MANAGEMENT
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Departments of Psychiatry and Human Behavior, Neurology, Neurosurgery, Anesthesiology and Surgery division of orthopedics and the University Medical Center Division of Continuing Health Professional Education.

Coordinator: Dr. Steve H. Sanders, Ph.D., assistant professor of psychiatry and human behavior (psychology), University of Mississippi School of Medicine; executive coordinator, pain clinic; and director of psychiatry biofeedback services, University Hospital.

The program will focus on multidisciplinary techniques to better manage patients suffering from chronic back or head pain. The proper and coordinated use of surgical, drug, and psychological/behavioral treatment methods will be discussed. The program is designed for family medicine practitioners, internists, neurologists, neurosurgeons, orthopedic surgeons, anesthesiologists, psychiatrists, and psychologists. Fee: \$40.00. Credit: 7 contact hours, .7 CEU, Category I of the Physician's Recognition Award, AMA.

Mar. 22-23, 1979

CLINICAL NEUROLOGY REVIEW
Sheraton Motor Inn, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Neurology, the Veterans Administration Medical Center Neurological Service and the University Medical Center Division of Continuing Health Professional Education.

Coordinator: Shri K. Mishra, M.D., assistant professor of neurology, University of Mississippi School of Medicine and chief of neurology service, Veterans Administration Medical Center.

Recent advances in diagnosis and treatment of common neurological disorders will be discussed. Topics will include management of headaches, diagnosis and management of stroke and neuromuscular diagnostic tests. Fee: \$100.00. Credit: 13 credit hours, 1.3 CEU, Category I of the Physician's Recognition Award, AMA.

FUTURE CALENDAR

April 16-19, 1979

PULMONARY MEDICINE INTENSIVE
University Medical Center, Jackson

April 20-21, 1979

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
Singing River Hospital, Pascagoula

All continuing education correspondence should be addressed to: Continuing Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

National Medic Alert Week Is Set for April

The second annual National Medic Alert Week is scheduled for April 1-7, 1979, and will focus on educating the public to hidden medical conditions.

One out of every five Americans has a hidden medical condition, according to Medic Alert Foundation International spokesmen. These range from medication allergies, to heart problems, to diabetes and epilepsy. The foundation's goal is to inform the public of their Medic Alert system and its value in emergency situations. They estimate that in a recent 12-month period, over 2,000 members reported Medic Alert had contributed to the saving of their lives.

Medic Alert Foundation International has been endorsed by American Academy of Family Physicians, American College of Allergists, American College of Physicians, American Hospital Association, and other related health care and emergency organizations.

MARCH 1979

MBMC Opens New G.I. Endoscopy Lab

Mississippi Baptist Medical Center's G.I. Endoscopy Lab, formerly housed in several rooms in the Outpatient Holding Area, has moved into a new 1600 square foot suite on the hospital's third floor.

The spacious new quarters allow the lab to be divided into procedural areas. A recovery room is also provided so that outpatients as well as inpatients can be treated in the area.

Procedures presently carried out in the new lab include: duodenoscopy, colonoscopy (with polyp removal), endoscopic retrograde cholangio pancreatogram, fiberoptic and rigid sigmoidoscopy, esophageal motility study, gastric analysis, Bernstein tests, gastroscopy, laparoscopy, and esophagoscopy.

The lab is staffed with a full-time registered nurse and a G.I. technician.

The move to the new area was made the first of December. Open House for physicians and staff was held on January 9.

Advanced Cardiac Life Support Course Will Be Next Month

An advanced cardiac life support course is scheduled for April 20-21, 1979, at Singing River Hospital in Pascagoula. The program is open to physicians, nurses and allied health personnel who have been certified by the American Heart Association in basic life support.

Sponsors are University of Mississippi School of Medicine Department of Anesthesiology, the UMC Division of Continuing Health Professional Education and Singing River Hospital Department of Emergency Medicine, in cooperation with the American Heart Association.

This continuing medical activity meets the criteria in Category I of the Physician's Recognition Award of the AMA, and credit has been approved by the American Academy of Family Physicians and the American College of Emergency Physicians. Program has been submitted to Mississippi Nurses' Association CERP Committee for approval.

Course director is Wayne P. Cockrell, M.D., of Singing River Hospital and co-director is Thomas J. Herrin, M.D., of UMC. Registration fee is \$110. For more information write: Division of Continuing Health Professional Education, University Medical Center, 2500 North State Street, Jackson, MS 39216; telephone (601) 968-4914.

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AAMA Schedules Convention in Meridian

The American Association of Medical Assistants, Mississippi Society, has scheduled its 13th annual state convention for April 6-8, 1979, at the Holiday Inn, NE, in Meridian.

Theme of this year's meet is "AAMA — Aspiration, Analysis, Motivation, Action." Featured on the opening day's program is a workshop conducted by a panel of four attorneys and one judge.

The convention is approved for continuing education credit. For more information contact: Glenda Jenkins, convention chairman, Meridian, telephone 483-5322, or Carol Lockey, board member, Jackson, telephone 362-8663. Mailing address for AAMA — Mississippi Society is P. O. Box 5593, Pearl, MS 39208.

AMA, Co-Sponsors Plan Rural Health Conference

Twelve health- and medically-oriented organizations have joined with the American Medical Association to sponsor the 32nd National Conference on Rural Health, scheduled for April 18-21, 1979, in St. Paul.

Programs examining all aspects of the delivery of health care and related matters are being developed by the AMA, the American Academy of Family Physicians, the American Dental Association, the American Hospital Association, the AMA Auxiliary, the American Medical Student Association, the American Nurses Association and the American Pharmaceutical Association.

Other co-sponsors arranging presentations and seminars are the Cooperative Extension Service of the United States Department of Agriculture, including both the Division of Home Economics and the National 4-H Council, the Farm Foundation, the Minnesota State Medical Association, the National Association of Counties and the National Safety Council.

Model projects which have proved successful in various parts of the country will be demonstrated and described so that registrants at the conference may determine possible implementation or adaptation of the model programs in their own communities.

Continuing medical education courses for physicians, introduced at the 1978 Rural Health Conference in Denver, will be extended at the St. Paul conference, providing intensive training courses in the illnesses, injuries and medical socioeconomics encountered by medical men and women serving rural populations.

111th MSMA Annual Session Is Set for May 6-10 at Biloxi

Education and entertainment are promised for physicians and their families at the 111th Annual Session of the Mississippi State Medical Association, set for May 6-10, 1979, at the Biloxi Hilton.

Outstanding speakers, including 16 essayists from out of state, have been lined up for the meet's Scientific Assembly. This year's educational program has been expanded with the addition of a 14th scientific section. The program has been accredited for 15 hours Category I credit toward AMA Physician's Recognition Awards, and in addition, 15 hours of postgraduate credit have been requested from the American Academy of Family Physicians.

In revealing plans for the annual session, Dr. J. Elmer Nix, chairman of the Council on Scientific Assembly, stated that meetings of four scientific sections (orthopedic surgery, anesthesiology, psychiatry, and pathology) will kick off the five-day convention on Sunday morning. A special seminar on office management will be a feature that afternoon. Conducted by Clinic Managers Association, the seminar will be divided into two sessions, "Personnel Management" and "Office Management."

The House of Delegates, convening on Monday morning, will be addressed by Dr. Tom Nesbitt, President of the American Medical Association. The House of Delegates will meet again on Thursday, May 10, for completion of business and election of officers.

In addition to meetings planned by the medical specialty societies, alumni of Tulane, Ole Miss and University of Tennessee have scheduled reunions. The annual association fellowship party is on the Tuesday evening agenda, and the third annual tennis tournament, directed by Dr. Leonard Ball of Gulfport, will be held on Wednesday afternoon.

Other events scheduled during the week are the annual meetings of Mississippi Medical Fraternal and Educational Society, Mississippi Foundation for Medical Care, Fifty Year Club, and Past Presidents.

Scientific and technical exhibits will again be offered to convention-goers.

Members of the Mississippi State Medical Association Auxiliary are finalizing plans for their 56th

Annual Session, held in conjunction with the MSMA convention. Registration will take place at the Biloxi Hilton. The general session meeting and luncheon will be held at the Broadwater Beach Hotel, according to Mrs. Sam Rowlett of Vicksburg, auxiliary president. Mrs. Jim C. Barnett of Brookhaven is president-elect.

Reservations, handled through the Biloxi Hilton, may be made by returning the reservation card included in the Jan. 12 "Blue Sheet." For more convention information, write Council on Scientific Assembly, Box 5229, Jackson 39216. The complete annual session program will be published in the April issue of the JOURNAL.

JMSMA Has New Managing Editor

JOURNAL MSMA has a new managing editor. She is Patsy Silver of Jackson, who joined the MSMA staff in January of this year.

Patsy is a graduate of Millsaps College with a B.A. in English. For the past several years she has worked part-time for advertising firms doing free lance writing of news releases, brochures and advertising copy for print media.

Patsy is married to Richard G. (Dick) Silver and they have two children, Bonnie, age 13 and Melanie, age 10. Dick is associated with the Dobbs-Maynard Advertising Agency of Jackson.

La.-Miss. O and O Society Meets in Biloxi

The 1979 annual meeting of the La.-Miss. Ophthalmological and Otolaryngological Society will be held April 19-21 at the Broadwater Beach Hotel, Biloxi.

For further information contact Ben A. Davis, Jr., CAE, Executive Secretary, P. O. Box 12314, Jackson, MS 39211, telephone (601) 956-7787.

Special Article

Legislative Issues, Physician Involvement

By Patsy Silver

Representative Don Richardson of Jackson is the newly appointed chairman of the House Committee on Pensions, Social Welfare and Public Health. In a recent interview with MSMA staff members, he discussed health care issues that are currently before the Mississippi Legislature, and offered candid suggestions to Mississippi physicians.

Responding to a question about the priority problems in public health, Rep. Richardson stated that his perspective was two-fold. He sees broad, overall issues which must be considered on a long-term basis, and specific issues to be approached from the standpoint of immediate legislative action.

Three priority issues which were present when he assumed the chairmanship were: (1) to get a generic drug bill passed, (2) to save the financially troubled Medicaid program, and (3) to get some sort of certificate of need bill before the House. As this issue went to press, an MSMA-endorsed generic drug bill had been reported out of Rep. Richardson's committee, passed by the House, and was being studied by the Senate Public Health Committee.

Proposals

Resolution of the Medicaid problem produced a bill to provide additional funding, to regulate providers to some degree, and to make some cutback in services. The certificate of need bill which the House Public Health Committee reported favorably was the bill sponsored by the hospital and nursing home associations creating a new Mississippi Health Care Commission to administer the certificate of need program. This bill calls for the commission to be made up of nine members appointed to staggered six-year terms by the governor, lieutenant governor and speaker of the House. Five of these members would be consumers, while four would be "providers of medical services."

Additional legislative matters which occupied the attention of the Public Health Committee were expenditure of Title XX monies, welfare legislation and the genetic screening bill jointly sponsored by MSMA and Mississippi Pediatric Society.

When asked to elaborate on the Medicaid program, Richardson stated that the 9.6% of total

Medicaid funds that went to physicians last year was not excessive, and that, in his opinion, there was not a lot of abuse of the Medicaid program by participating physicians. He agreed, however, that public opinion might hold differently in the light of controversial and sometimes erroneous press reports issued by HEW.

During further discussion of public opinion, Rep. Richardson revealed that while there is growing consumer concern over rising costs in medical care, the public comment his office receives does not indicate a desire for socialized medicine. Complicating this matter is the fact that while people may not want government to take over medicine, they definitely want government to "do something" about rising medical care costs. He sees the role of legislative action as a stimulus to medical providers to voluntarily hold down costs. There is always pressure on a federal level and a consumer level, and lawmakers must say "Hold down costs or government *will* regulate."

Consumers Complain

Emphasizing that the single most important complaint of the consumers is rising costs, Rep. Richardson suggested that there is very little public knowledge of what actually causes the increases. The most vocal segment are the poor, the receivers of government assistance, who demand more help. The average citizen who can still afford to pay most of his bills does not complain as frequently. There is no doubt, the committee chairman believes, that they are frustrated. They may recognize that inflation is the culprit in escalating costs, he says, but they believe, quite frankly, that "doctors make too much money."

Besides the matter of inflation's contribution to excessive rises in medical costs, Rep. Richardson acknowledged that sometimes the "system" is to blame. He illustrated this by pointing out that county hospitals, for instance, are under great pressure to justify their presence — and many patients whose conditions may not require hospitalization are admitted, in an effort to guarantee that the county will not lose its hospital. While this may not be an intentional effort on the part of physicians to abuse the system, it does illustrate that the system itself contributes to health costs.

Other Factors

A factor which consumers sometimes fail to recognize is the effect that their own unnecessary trips to the doctor, emergency room or hospital bed has on rising costs. The feeling that "After all, I'm paying

for health insurance, why not take advantage of it?" is a prevalent attitude. This is an area where Rep. Richardson believes patient education can help. In this regard, he noted that the MSMA-sponsored bill calling for health education in primary and secondary schools died in committee, and he believes that there might not have been enough understanding among lawmakers about the benefits of health education. Further compromising the bill's chances could have been resistance on the part of many educators, who feel that they are already teaching health education in an adequate way.

Suggestions

When Rep. Richardson was asked if he had any suggestions for Mississippi physicians, he replied that his advice to physicians could come from two standpoints — as consumer and as lawmaker.

As a consumer, he believes that one of the greatest steps could be made in the area of patient education. He would like to see physicians practicing more preventive medicine — educating their patients to their own roles in maintaining good health. A key to physicians' effectiveness in this effort, he believes, is for them to be good examples. Advice to a patient to lose weight and stop smoking will have little impact coming from a doctor who is overweight and



Representative Don Richardson of Jackson is the new chairman of the House Committee on Pensions, Social Welfare and Public Health. An eight-year veteran of the Mississippi Legislature, he attended Holmes Jr. College, Delta State University, Mississippi State University, Mississippi College and Jackson School of Law. He holds B.S. and Master's degrees in Administration. The Choctaw County native was formerly an educator and real estate associate. At 35, he is the youngest member of the Hinds County delegation. He also serves on the Appropriations, Constitution, Education and Judiciary Committees and the Mississippi Medicaid Commission.

who also is a smoker. Rep. Richardson stated that he had detected a lack of nutrition education in medical school training, and he felt this might be one area which needed to be expanded. A better-informed physician can better inform his patients, he commented.

Political Activity

Speaking as a lawmaker, Richardson candidly offered advice to state physicians. He believes that they must become more active politically. Recognizing that physicians historically have declined political activity, viewing it as "too self-serving," he stated that the time has come when physicians must speak out on issues which affect them and their patients. There are too many single-interest groups who are very vocal and active, and they keep pressures on.

Physicians have won some tough arguments over legislative matters recently, but not because they were politically forceful, he claims. Richardson feels these victories have been due to the fact that medicine's position was "right" on those issues.

The physician's image as a highly respected individual is diminishing in the light of increasing public frustration, and he must no longer take his position for granted. Citing the ratio of optometrist response to physician response on a given piece of legislation, for example, as five to one, Richardson indicated that others are far more vocal. The ratio of participation in elections would probably be, he feels, about 25 to 1 against the physicians.

Rep. Richardson pointed out that as an association, the physicians are ably represented by their spokesmen, but that individuals contacting their own legislators can have additional impact. He suggests, simply, that physicians become aware of issues and take a moment for a letter or phone call to make their positions known.

111th Annual Session of MSMA

May 6-10, 1979
Biloxi Hilton, Biloxi

Mark Your Calendars Now!

ORGANIZATION / Continued

New Associate Professor Added to UMC Faculty

Dr. Philip G. Rhodes has been named associate professor of pediatrics and chief of the division of newborn medicine at the University of Mississippi Medical Center.

His February appointment was announced by Dr. Norman C. Nelson, UMC vice chancellor and medical school dean, following approval by the Board of Trustees, State Institutions of Higher Learning.

Dr. Rhodes comes to the Medical Center from Kansas City, where he has been an associate professor of pediatrics at the University of Missouri-Kansas City School of Medicine since July and staff neonatologist at Children's Mercy Hospital since 1974.

Dr. Rhodes earned the B.A. degree at Friends University in Wichita and the M.D. degree at Kansas University School of Medicine. He held a fellowship and took residency training at Children's Mercy Hospital in Kansas City from 1970-1974.

AAMC Protests Medical Education Cuts

Reacting strongly to the President's budget message, the Association of American Medical Colleges (AAMC) has warned that medical education may become confined to the wealthy if the Carter Administration succeeds in chopping federal aid.

John A. D. Cooper, M.D., AAMC president, said the Carter Administration budget would cut broad medical educational support (capitation) by 50 per cent this year and eliminate it altogether next year. Federal student financial aid also would be sharply reduced.

Dr. Cooper made these remarks during testimony before the Senate Subcommittee on Health headed by Senator Edward Kennedy (D-Mass.) during one day of oversight hearings on President Carter's health budget request for fiscal year 1980.

He predicted that if capitation is cut by 50 per cent in 1979 and eliminated in 1980, the nation's medical schools will lose \$129 million by 1980. He said the schools would face difficulties in securing increased support from the states and would probably be forced to increase medical school tuitions by 100 per cent in public schools and by 25 per cent in private schools. This, he said, comes at a time when costs for medical students have already increased sharply, and would make it very difficult for minority and low income students to be able to afford a medical education.

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Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

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Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

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Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

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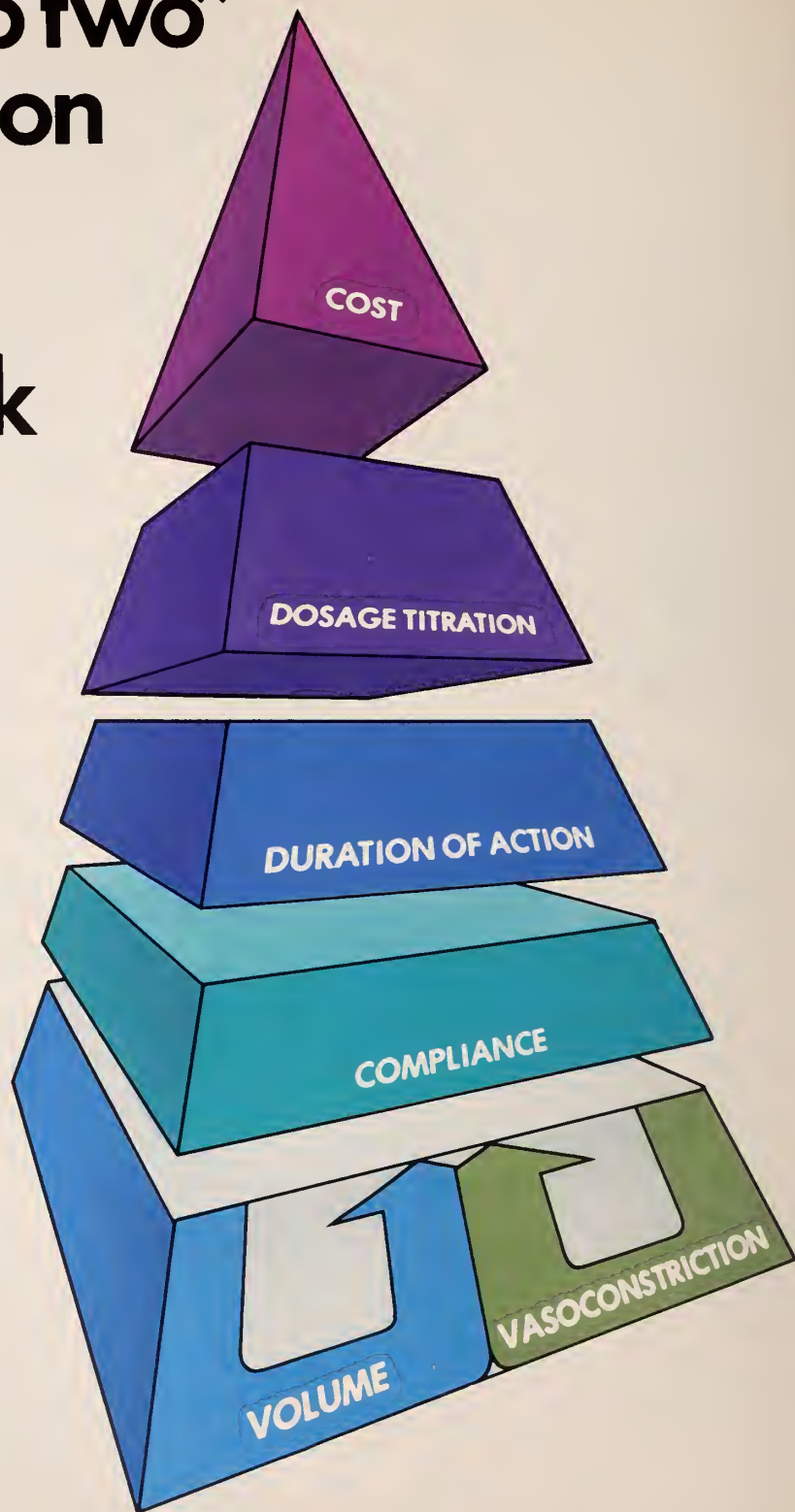


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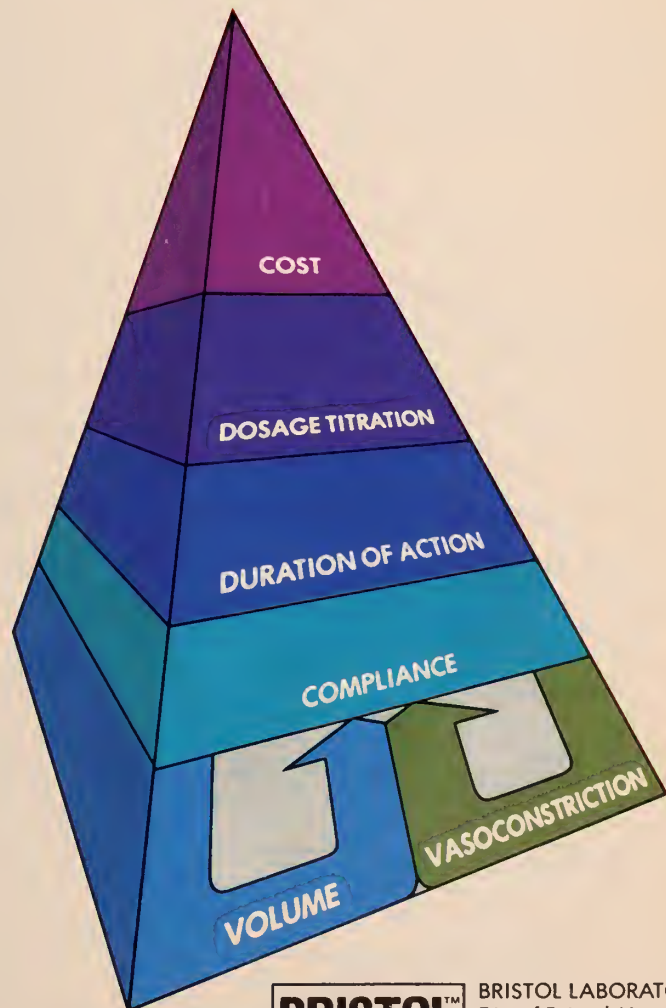
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References: 1. Finnerty, F.A. et al.: An Evaluation of Step 2 Regimens in Hypertension, data on file, Bristol Laboratories, 1977. 2. Red Book 1977.

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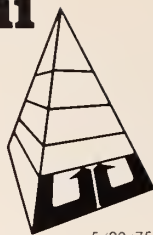
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Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Thiazides may be additive or potentiative of the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in pregnancy: Usage of thiazides in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing mothers: Thiazides cross the placental barrier and appear in cord blood and breast milk.

PRECAUTIONS: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance: namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. Any chloride deficit is generally mild and usually does not require specific treatment except, under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased or unchanged. Latent diabetes mellitus may become manifested during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS:

A. Gastrointestinal system reactions: Anorexia, gastric irritation, nausea,

vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis.

B. Central nervous system reactions: Dizziness, vertigo, paresthesias, headache, xanthopsia.

C. Hematologic reactions: Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

D. Dermatologic-Hypersensitivity reactions: Purpura, photosensitivity, rash, urticaria, necrotizing angitis (vasculitis) (cutaneous vasculitis).

E. Cardiovascular reaction: Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates, or narcotics.

F. Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness.

Where adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

USUAL DOSE: The average adult diuretic dose is 25 to 200 mg. per day.

The average adult antihypertensive dose is 50 to 100 mg. per day.

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

HOW SUPPLIED: Saluron (hydroflumethiazide 50 mg.): Bottles of 100.

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(hydroflumethiazide, reserpine antihypertensive formulation)

For complete information consult Official Package Circular.

WARNING

This fixed combination drug is not indicated for initial therapy of hypertension. Hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension is not static, but must be reevaluated as conditions in each patient warrant.

CONTRAINDICATIONS: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

WARNINGS: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients.

Use in pregnancy: Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fetal reactions may occur with reserpine during electrosensory therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

PRECAUTIONS: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss may cause digitalis intoxication. Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Serum ammonia elevation may precipitate coma in precoma hepatic cirrhosis. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or bronchial asthma and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being pre-diabetic should be kept under close observation if treated with this agent.

ADVERSE REACTIONS: Hydroflumethiazide: Skin-rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. **Reserpine:** Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares.

USUAL DOSE: 1 tablet b.i.d.

HOW SUPPLIED: Salutensin (hydroflumethiazide 50 mg., reserpine 0.125 mg.): Bottles of 100 and 1000.

Salutensin-Demi (hydroflumethiazide 25 mg., reserpine 0.125 mg.): Bottles of 100.

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New UMC Faculty Members Are Announced

Nine faculty members have joined School of Medicine and centerwide faculties at the University of Mississippi Medical Center.

Dr. Norman C. Nelson, UMC vice chancellor and School of Medicine dean, announced the appointments following approval by the Board of Trustees, State Institutions of Higher Learning.

New School of Medicine faculty are Dr. William A. Causey, associate professor of medicine; Dr. Jack Rubin, assistant professor of medicine; Dr. Susan Uhrmann, assistant professor of pediatrics; Dr. Jill Unger Gallien, instructor in pediatrics; Ms. Anne C. Turner, instructor in preventive medicine; and Ms. Myrna Kruckeberg, instructor in psychiatry and human behavior (psychiatry).

Named to the centerwide faculty as instructors in physiology and biophysics and postdoctoral fellows are Dr. Yi-Jen Pan, Dr. Thomas L. Smith and Dr. Karen A. Stanek.

Dr. Causey is a B.S. graduate of Mississippi College. He earned the M.D. degree at the UMC School of Medicine in 1968 and interned and took residency training there from 1968-1972. He was a fellow at the University of Chicago Hospital from 1974-1975. Since 1975, Dr. Causey has been assistant professor of medicine at the University of Chicago Pritzker School of Medicine. He served in the Commissioned Corps of the Public Health Service from 1972-1974.

Dr. Rubin, an instructor in medicine at the University of Missouri Medical Center since 1977, earned the B.Sc. degree at McGill University in Montreal. He earned the M.D. at the University of Saskatchewan in 1971. He was an intern and fellow at Toronto General Hospital, and took residency training and later held a fellowship at Toronto Western Hospital. He also took residency training at St. Michael's Hospital in Toronto.

Dr. Uhrmann earned the B.A. degree at the University of Delaware and the M.D. degree at Thomas Jefferson University Medical School in Philadelphia. She took residency training at Wilmington (Delaware) Medical Center and in 1976 was a neonatal fellow at the Milton S. Hershey Medical Center in Pennsylvania.

Dr. Gallien comes to UMC from Bloomington, Ind., where she has been a student health physician at Indiana University since 1976. She served as acting director of pediatrics at the Lyndon B. Johnson Tropical Medical Center in Pago Pago from 1974-1976. She earned the B.S. degree at Purdue University and the M.D. degree at Indiana University

School of Medicine. Dr. Gallien interned at Riley Children's Hospital in Indianapolis and took residency training at Akron (Ohio) Children's Hospital.

Legal Liability — Physicians Are Not Alone

If it is any consolation to physicians who are complaining about soaring, skyrocketing insurance rates, architects and engineers are also the targets for malpractice lawsuits.

Legal actions against architects have increased 20% a year in recent years, according to a survey. The study was prepared by the Office for Professional Liability Research of Victor O. Schinnerer & Company, a Washington-based insurance carrier. The study also disclosed that the average value of claims against architects and engineers for alleged design and construction failures had tripled during the past 18 years, and that 29.6% of insured architecture or engineering firms were sued in 1976.

The survey reported that insurance premiums for \$5 million worth of liability coverage, regarded as a minimum for an architect involved in a major construction project, can cost \$100,000 a year.

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ORGANIZATION / Continued

Medical Photography Contest Is Announced

The American Society of Clinical Pathologists, medical specialty society headquartered in Chicago, has announced its first annual medical photography competition, open to anyone in the medical/health care field interested in scientific photography.

The society is offering cash prizes of \$250, \$150 and \$100 for first, second and third-place winners in each of three categories: Gross, Microscopic and Electron Microscopic. Entries will be judged on informational content, composition, color balance, color contrast and originality. All winning entries will become the property of the American Society of Clinical Pathologists.

Deadline for entries is June 1, 1979. Rules of the competition and entry forms may be obtained from: American Society of Clinical Pathologists, First Annual Medical Awards Competition, 2100 W. Harrison St., Chicago, IL 60612.

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Joint Practice Committee Meets in Jackson



Jan Evers, R.N., of Jackson, was elected chairman of the Committee on Joint Practice at a meeting January 25, 1979, at the Holiday Inn Medical Center in Jackson. She is pictured above with Dr. S. H. McDonnieal, outgoing chairman. Dr. McDonnieal and Mary Stainton, R.N., of Hattiesburg, presented reports on the National Conference on Joint Practice held last November in Dallas. The committee will be finalizing plans for a state-wide Joint Practice Meeting to be held next year.

Medicaid Faces Severe Reductions

The Mississippi Medicaid Program is apparently headed for both a budget crunch and a reduction in services.

The Medicaid program's average monthly cost in 1978 increased 28% over 1977 according to Medicaid Commission figures. The increase caused Medicaid officials to ask this session of the legislature for a \$3 million supplementary appropriation matching \$12 million in federal monies to fund an anticipated \$15 million deficit for the year.

A comparison of the last six months of 1977 and 1978 show where the budget problems occurred. Inpatient hospital days increased about 5,000 days; physician visits were up by 47,161; drug prescriptions increased more than 300,000 and days in intermediate care nursing homes were up by 78,970.

As JOURNAL MSMA went to press the legislature was considering the Medicaid deficit as well as restrictions on services to reduce annual in-patient hospital days from 40 to 30, annual out-patient hospital visits from 30 to 6 and annual visits to physicians from unlimited to 24.

Medicaid, which began in 1970 as a \$40 million program with 200,000 recipients, last year served over 285,000 recipients at a cost of \$171,949,077.

FTC Cites LCME "Defects"

The Liaison Committee on Medical Education still has conflict of interest problems, the Bureau of Competition of the Federal Trade Commission has asserted.

Bureau of Competition deputy director Alan K. Palmer, in a letter to the Office of Education, said the committee has failed to comply with conflict-of-interest criteria.

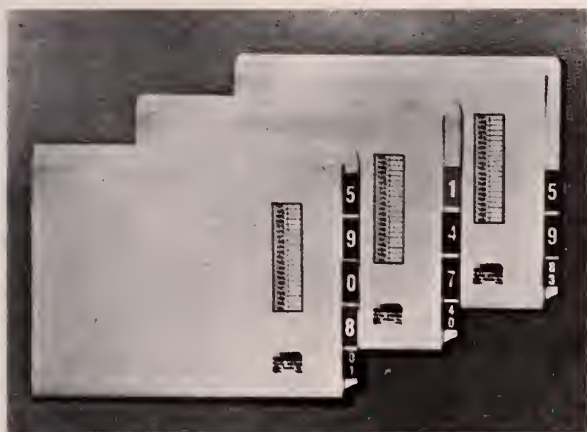
HEW regulations, he pointed out, require accrediting groups to be autonomous. Palmer asserted the LCME still is overly dominated by the American Medical Association and Association of American Medical Colleges.

The question of the LCME's composition was raised by the Bureau of Competition in 1977, at which time the commissioner of education ordered the body which accredits medical schools to come up with a plan to reduce its domination by these groups.

Palmer, in his letter, said the LCME failed to do this. He recommends requiring the LCME to correct its "major defects" by September 1979, when its recognition as the accrediting body for medical schools expires.

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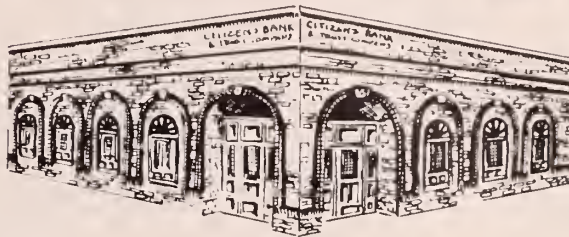
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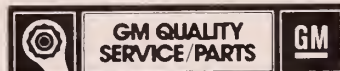


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ORGANIZATION / Continued

GOP Files Report Against NHI

A health advisory group of the Republican National Committee has rejected any program of federally-financed, federally-administered national health insurance, calling instead for "appropriate steps" to provide for the uncovered poor and those threatened by catastrophic expenses.

The report was filed by the Health Subcommittee of the GOP Committee's Advisory Council on Human Concerns. Heading the panel was former Pennsylvania Senator Hugh Scott.

The efforts of the Carter Administration and the Kennedy-Labor wing to impose a sweeping NHI program were assailed in the Republican Committee's report, "A Statement on Health Policy."

Some Democratic members of Congress have proposed a \$300 billion NHI, noted the document. "At a time when a workable national health policy is essential, all we hear from the President is vicious attacks on our medical professionals and a set of ten principles for national health insurance which considers the details of cost and coverage without addressing the question of why a totally federalized national health insurance program is needed at all," asserted the GOP panel.

Recommended was "a system which would build on and strengthen the private insurance protections which now cover more than 80 per cent of the population rather than tearing that down."

HEW Limits Medicaid Lab Costs

The Department of Health, Education and Welfare has proposed to limit Medicaid reimbursement for several laboratory tests to their lowest locally-available prices. This step represents the second stage of an anti-inflation initiative begun in July of last year with new regulations limiting Medicare and Medicaid payments for laboratory tests and medical equipment to the lowest price that is widely available for the same quality in a particular community.

Initially, HEW applied this limit to the 12 laboratory tests most widely used by Medicare and Medicaid patients and to the most commonly purchased pieces of medical equipment — hospital beds and wheelchairs.

The new proposal has been published for public comment and would add seven additional laboratory tests to the list of tests for which Medicaid will limit

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Each capsule contains 5 mg
chlordiazepoxide HCl and 2.5 mg clidinium Br.

Please consult complete prescribing information, a summary of which follows:

Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated, avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment, blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.





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*Librax has been evaluated as possibly effective for this indication. Please see brief summary of prescribing information on preceding page.



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payments to the lowest price at which they are locally available. These seven tests, frequently paid for by Medicaid but not by Medicare, are: (1) sickling of red blood cells; (2) hemoglobin, electrophoresis; (3) microscopic examination, stain for bacteria (including smear for gonococcus); fungi, ova and parasites, any source; (4) heterophil antibodies, screening; (5) lead, blood, quantitative; (6) iron, serum, automated; (7) pregnancy test.

MSMA Auxiliary Holds Legislative Day



Sixty-seven legislators were guests at a luncheon given by the Mississippi State Medical Association Auxiliary in connection with Legislative Day, held Jan. 16 at the Coliseum Ramada Inn in Jackson. Dr. Carl G. Evers of Jackson, MSMA President, was speaker for the occasion, which was designed to foster greater understanding of the legislative process and of MSMA legislative goals. Pictured with Dr. Evers are Mrs. Sam Rowlett, Jr. of Vicksburg, left, president of the auxiliary, and Mrs. Jim C. Barnett of Brookhaven, president-elect.



Pictured at the luncheon honoring legislators are MSMA Auxiliary members (left to right) Mrs. John Soares, Mrs. Robert Soares and Mrs. John Estess, and their guests (left to right) Sen. Howard Dyer, Rep. H. L. (Sonny) Meredith and Sen. J. K. (Buddy) Gresham.

Health Benefits Exceed \$10 Billion

Americans received a record \$10.7 billion in health insurance benefits from insurance companies during the first six months of 1978, 18% more than they received in the same period in 1977, says the Health Insurance Institute.

This means that Americans are receiving an average of \$58.9 million a day from insurance companies to help meet the expense of accidents and illness, notes the Institute.

A breakdown of the total shows that the largest part, \$8.3 billion, helped pay for medical expenses, an increase of 18% over the previous year. Other benefits included: \$1.6 billion for disability income, up 20% over 1977; \$0.6 billion for dental expenses, up 21% over 1977; \$0.2 billion for accidental death and dismemberment, up 32% over 1977.

Appendicitis Is Still a Problem

Failure by parents and physicians to recognize appendicitis in its early stages had led to an increase in the incidence of ruptured appendixes in children, according to two pediatric surgeons at Children's Hospital, Columbus, OH. The report appeared in the January issue of *Pediatrics*, the scientific journal of the American Academy of Pediatrics.

According to the physicians, morbidity is increased when appendicitis is allowed to progress to the point of rupture, due to increased postoperative complications.

"Parents must be made acutely aware of the symptoms of appendicitis and encouraged to seek medical attention," said the physicians.

"And it is the primary physician who must be painstakingly thorough in the evaluation of the child with abdominal pain and must be encouraged to seek surgical consultation when indicated," they remarked.

"Although the quality of medical care in the United States has been improving, management of appendicitis in children has not kept pace. The mortality of this common surgical disease has remained relatively unchanged since the 1940s, when antibiotics were introduced in the treatment of ruptured appendix," the surgeons concluded.

Authors of the report are Ronald A. Savrin, M.D. and H. William Clatworthy, Jr., M.D., Department of Surgery, Ohio State University Division of Pediatric Surgery, The Children's Hospital, Columbus, OH.

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IN CONCLUSION

Americans seem to place greater importance on not smoking or drinking excessively to stay healthy than they do on exercising regularly, reports the Health Institute. A recent study of American health habits by the Institute shows that only about one-third of the public regularly exercises two or three times a week. However, more than half the respondents indicated that they limit smoking to a pack a day and that they are careful about their drinking habits.

Physicians in at least four states can be held liable for the lifetime costs of caring for a child born with a congenital defect if they fail to properly advise the mother that she faced a risk of bearing such a child. A decision in the New York State Court of Appeals makes that state the most recent to allow this type of litigation, joining Texas, California and Wisconsin. While the decision extended physician liability by permitting parents to sue, it did restrict damages somewhat.

In a move designed to lower hospital costs, Blue Cross and Blue Shield has ordered its member plans to phase out payment for certain routine diagnostic tests for non-surgical hospital patients unless specifically ordered by a physician. The action will be implemented slowly as member insurance plans work with physicians, hospitals and other providers to perfect "medical necessity" requirements which will deny payment for such routine hospital admission tests as electrocardiograms, chest x-rays, etc.

"Legal action charging medical specialty societies with antitrust violations is expected to continue and may threaten the very function of these organizations." That was the prediction of lawyers and physicians attending a conference of the Council of Medical Specialty Societies, as reported in "Ob-Gyn News." Litigation has increased since Congress gave states power to act on antitrust matters and increased federal funding of state antitrust programs.

A Massachusetts court ruling that a "no code" order does not require prior judicial approval was hailed as a major precedent by physicians in a panel discussion at the annual scientific assembly of the American College of Chest Physicians. The court ruled that responsibility for "no code" decisions is peculiarly within the competence of the medical profession. Physicians at the conference were advised that any "no code" order should be clearly marked on patient's chart, to avoid legal trouble later.

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- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim has been much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
20	9	1 teasp. (5 ml)	½ tablet
40	18	2 teasp. (10 ml)	1 tablet
60	27	3 teasp. (15 ml)	1½ tablets
80	36	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	½ the usual regimen
Below 15	Use not recommended

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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Please see reverse side for summary of product information.

April 1979

Journal of the
State Medical
Association

Mississippi

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Contents:

Stress Films in Acute
Trauma

Complete Program
of MSMA's
111th Annual Session



PEDIATRIC INDICATIONS* FOR BACTRIM CONTINUE TO GROW...

*URINARY TRACT
INFECTIONS*

*PNEUMOCYSTIS
CARINII
PNEUMONITIS*

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*ACUTE OTITIS
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*Contraindicated in children under 2 months of age.

Please see summary of product information on following page.

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(trimethoprim and sulfamethoxazole)



Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections. For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mother; infants less than two months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β -hemolytic streptococcal tonsilopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function; possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprol-thrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarthritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis. A guide follows.

Children two months of age or older

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
22	10	1 teasp. (5 ml)	1/2 tablet
44	20	2 teasp. (10 ml)	1 tablet
66	30	3 teasp. (15 ml)	1 1/2 tablets
88	40	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1/2 the usual regimen
Below 15	Use not recommended

PNEUMOCYSTIS CARINII PNEUMONITIS: Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole; bottles of 100. Tel-E-Dose[®] packages of 100. Prescription Paks of 20 Tablets each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500. Tel-E-Dose[®] packages of 100. Prescription Paks of 40, available singly and in trays of 10. Pediatric Suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole—cherry flavored—bottles of 16 oz (1 pint). Suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole—fruit-licorice flavored—bottles of 16 oz (1 pint).



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- April 4-7 **Tennessee Medical Association**
Airport Milton Inn
Memphis, Tennessee
- April 19-21 **Alabama Medical Association**
Birmingham Hyatt House, Civic Center
Birmingham, Alabama
- April 19-22 **Missouri State Medical Association**
Chase-Park Plaza Hotel
St. Louis, Missouri
- April 20-22 **Georgia Medical Association**
De Soto Hilton
Savannah, Georgia
- April 21-22 **Iowa Medical Society**
Hyatt House
Des Moines, Iowa
- April 22-25 **Arkansas Medical Society**
Little Rock Convention Center
Little Rock, Arkansas
- April 25-29 **Arizona Medical Association**
Safari Hotel
Scottsdale, Arizona
- April 26-29 **South Carolina Medical Association**
Myrtle Beach Hilton
Myrtle Beach, South Carolina
- April 29-May 2 **Nebraska Medical Association**
Holiday Inn
Kearney, Nebraska

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EMS Symposium Held in Jackson

More than 340 physicians, nurses and emergency medical technicians attended the 1979 Statewide Symposium on Emergency Medical Services held recently at the Coliseum Ramada Inn in Jackson.

Opening day sessions focused on paramedics, and later sessions dealt with poison control. Specific purposes of the symposium, according to Wade Spruill, director of the EMS Division of the Mississippi State Board of Health, were to provide information on these subjects and to examine the effectiveness of current training methods.

Chairman of the sessions on the subject of paramedic training and utilization, communications and advanced life support was Dr. Frank J. Morgan, Jr., assistant state health officer of the Mississippi SBH.

Guest speakers included Dr. Alan Dimick, physician technical advisor for the Department of Health, Education and Welfare, Birmingham, AL; Dr. Richard H. Clark, president of Southeast MS Air Ambulance District, Hattiesburg, MS; Ned Butler, communications consultant for Region IV of the Department of HEW, Montgomery, AL; and Dr. Phillip K. Bobo, Region II medical director for Alabama Emergency Medical Services, Tuscaloosa.

Dr. Briggs Hopson, Jr., EMS medical control director, was chairman of the final two days' meetings dealing with the subject of poisoning. Among the speakers who discussed types of poisoning, handling and treating the poisoned patient, and use of the new State Poison Control Center at the University of Mississippi Medical Center were: Dr. Robert Goselin of Dartmouth Medical School; Dr. Samuel H. Sandifer of the University of South Carolina Medical Center; Dr. Sylvia Micik, director of Poison Control Center of LaJolla, CA; and Dr. John D. Bower, medical director of UMC Poison Services.

This year's meet, which was certified for continuing education credit for physicians, nurses and EMTs, featured for the first time, team competition in basic life support skills. Rescue teams competed in cardiopulmonary resuscitation drills and a written test. Overall competition winners were Brent Gup-ton and Randy Seymour, a team representing AM-SERV, of Biloxi.

According to Director Spruill, the state's system of emergency medical services is expanding. With the passage of the Mississippi Emergency Medical Services Act of 1974, programs with the overall goal of improving emergency medical care in the state were instituted. These programs were limited to

basic emergency care (the stabilization and transportation of emergency patients).

In 1977, legislation authorizing the training of Mobile Intensive Care Paramedics was enacted, a move toward development of an advanced life support (ALS) system throughout the state. Currently, there are only 29 licensed paramedics in the state, but paramedic training programs are now operational in Tupelo, Starkville, Corinth and Biloxi.

Symposium speaker Dr. Richard Clark emphasized that careful planning and the cooperation of physicians and hospitals are necessary for the development of a good paramedic training program.

The Mississippi Legislature is studying a bill which is expected to increase the effectiveness of the state's emergency medical system. If the bill becomes law, requirements for continuing education, certification and training programs will be regulated by the Division of EMS. Spruill said this bill would make the Mississippi law conform to national laws.

Sponsors of the third annual symposium were: EMS Division of the Mississippi State Board of Health; UMC Poison Services; Mississippi Chapter, American College of Surgeons and Mississippi Nurses Association. MSMA was an affiliate sponsor.

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State Is Meeting Immunization Goals

Mississippi is exceeding childhood immunization goals set by the Department of Health, Education and Welfare, and has initiated programs to meet another HEW goal, nationwide monitoring of newborns.

At a recent conference, Secretary Califano stated that the nation is within reach of its goal of having 90% of children immunized by the fall of 1979, and he remarked that state health officers and representatives of volunteer groups are responsible for the advances.

Figures obtained from the State Board of Health show that of 373,000 Mississippi children enrolled in kindergarten through the 8th grade, 92% are in compliance with a 1978 immunization statute enacted by the state legislature. These figures are based on preliminary reports filed by state school districts last October.

Barry Trostel, supervisor of the immunization program administered by the State Board of Health, says that final reports are still being studied, but that some districts have achieved remarkable compliance. District 11 on the Coast has submitted a final report indicating 98.8% compliance, and the nine-county district including the McComb area has better than 99% compliance. Trostel estimates that the overall report will total 98% compliance throughout the state, "a remarkable achievement considering that this is the first effort on a state-wide basis to secure total immunization of school children."

Secretary Califano urged the development of a nationwide system for monitoring births and ensuring that newborn children receive their proper immunizations on schedule.

In Mississippi, according to Trostel, procedures exist for each county health department to send a motivational letter to parents of newborns, making them aware of immunization requirements and scheduling, and urging that they see that their infant receives the recommended vaccines. In addition, a system already functions whereby citizens who regularly use public health services are encouraged to make return appointments, and are the target for follow-up efforts when they fail to do so.

The State Board of Health will soon implement a plan which will put immunization information into the hands of every mother of a newborn infant in the state. An immunization message will be incorporated into the standard certified birth certificate form letter which every mother now receives.

A special effort will be directed at high risk new-

borns. These are newborn infants who, statistically, are likely to be under-immunized because of certain socioeconomic factors. Additionally, licensed day care centers must be certified as to immunization of children enrolled, so that many pre-school children are reached.

The State Board of Health conducts an on-going publicity effort, and exercises special efforts in cooperation with county specialty groups and other providers. Many voluntary groups such as civic clubs cooperate in publicizing immunization messages.

UMC Psychiatry Department Hosts Massachusetts Pediatrician

Dr. T. Berry Brazelton, chief of the Division of Child Development, Children's Hospital Medical Center, Boston, Mass., spoke on "Parent-Infant Reciprocity" at the University of Mississippi Medical Center in February. Dr. Brazelton was the guest of the UMC psychiatry department for weekly grand rounds.

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Treatment with TRIAVIL—a balanced view:

TRIAVIL is contraindicated in CNS depression from drugs, in the presence of evidence of bone marrow depression, and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. TRIAVIL may impair mental and/or physical abilities required for performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to overdosage of other drugs or mask other disorders. The possibility of suicide in depressed patients remains until significant remission occurs. Such patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

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for a brief summary
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TRIAVIL® 4-25: Each tablet contains
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TRIAVIL® 4-10: Each tablet contains
4 mg perphenazine and 10 mg amitriptyline HCl.

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); evidence of bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Should not be given concomitantly with a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. When used to replace a monoamine oxidase inhibitor, allow a minimum of 14 days to elapse before initiating therapy with TRIAIVL. Therapy should then be initiated cautiously with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAIVL should not be given concomitantly with guanethidine or similarly acting compounds since TRIAIVL may block the antihypertensive action of such compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. Dosage of anticonvulsive agents may have to be increased. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time, particularly in high doses. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. In patients who use alcohol excessively, potentiation may increase the danger inherent in any suicide attempt or overdose. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of some untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdose of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAIVL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides. There is sufficient experimental evidence to conclude that chronic administration of antipsychotic drugs which increase prolactin secretion has the potential to induce mammary neoplasms in rodents under the appropriate conditions. There are recognized differences in the physiological role of prolactin between rodents and humans. Since there are, at present, no adequate epidemiological studies, the relevance to human mammary cancer risk from prolonged exposure to perphenazine and other antipsychotic drugs is not known.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAIVL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone. **Perphenazine:** Extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) have been reported and can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmic involuntary movements of the tongue, face, mouth, or jaw. Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. Fine vermicular movements of the tongue may be an early sign of the syndrome. The full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema, reversed epinephrine effect, hyperglycemia, endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; other adverse reactions reported with various phenothiazine compounds, but not with perphenazine, include grand mal convulsions, cerebral edema, polyphagia, pigmentary retinopathy, photophobia, skin pigmentation, and failure of ejaculation.

The phenothiazine compounds have produced blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); and liver damage (jaundice, biliary stasis).

Pigmentation of the cornea and lens has been reported to occur after long-term administration of some phenothiazines. Although it has not been reported in patients receiving TRIAIVL, the possibility that it might occur should be considered.

Hypnotic effects, lassitude, muscle weakness, and mild insomnia have also been reported.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs and must be considered when amitriptyline is administered. **Cardiovascular:** Hypotension; hypertension; tachycardia; palpitation; myocardial infarction, arrhythmias; heart block, stroke. **CNS and Neuromuscular:** Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia, tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Anticholinergic:** Dry mouth; blurred vision; disturbance of accommodation; increased intraocular pressure; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. **Allergic:** Skin rash; urticaria; photosensitization; edema of face and tongue. **Hematologic:** Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura, thrombocytopenia. **Gastrointestinal:** Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). **Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. **Other:** Dizziness, weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. **Withdrawal Symptoms:** Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdose should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1-3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdose with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

J8TR31 (DC6613215)

For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., INC., West Point, Pa. 19486.

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ANUSOL-HC[®] SUPPOSITORIES

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ANUSOL-HC[®] CREAM

Rectal Cream with Hydrocortisone Acetate

CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani. Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol[®] Suppositories or Ointment.

Contraindications: Anusol-HC[®] Suppositories and Anusol-HC[®] Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning

and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24); in silver foil strips with Anusol-HC W/C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01); with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F).

Full information is available on request.



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NEWSLETTER

April 1979

Dear Doctor:

Last month President Carter and HEW Secretary Califano began a massive drive to enact hospital cost containment legislation, recognizing that it faced some opposition. Carter characterized the battle as the "hospital lobby" against "the American people." The Administration's bill (HR 2626) would provide mandatory controls to limit the annual increase in acute care hospitals' inpatient revenues should the Voluntary Effort fail to meet a given year's limit.

The National Steering Committee of the Voluntary Effort (VE) has reaffirmed the VE's goals in protest to the HEW goal of a 9.7% limit on expenditure increases, which they termed "unrealistic and unnecessary." Voluntary Effort is sponsored by the AMA, American Hospital Association, and Federation of American Hospitals.

Other provisions of the Administration's bill include: only inpatient revenues would be subject to a cap; Federal institutions, long-term care facilities, HMO hospitals and small rural hospitals would not be regulated; a modified wage "pass-through" for hospital workers would be allowed, a concession to the demands of labor unions; and a National Commission on Cost Containment would be established.

The American Society of Internal Medicine, representing 16,000 internists, went on record as opposing the Administration's plan in testimony before the Senate Subcommittee on Health, which began hearings March 13 on cost containment legislation. ASIM calls the bill discriminatory, stating that it makes the health care industry "the only sector of the economy that is being faced with the prospect of mandatory controls."

Hospital costs in Mississippi are the lowest in the nation, according to a survey by Equitable Life Assurance Society. An editorial in St. Dominic Hospital's newsletter says national news media figures of astronomical hospital costs are misleading. Daily rates in 57% of the states are under \$100 (Mississippi's average rate is \$67.00) and only 8% of states charge over \$135, among them New York (\$158) and Alaska (\$179).

Few people would deny that medical care costs are rising, but figures reported by Los Angeles County Medical Association put a new perspective on the problem. Between 1967-1977, hospital charges rose 194%. During the same period postal fees went up 226%; legal fees were up 220%; social security taxes jumped 308%; HEW's budget went up 345%; federal budget was up 400% and cost of running Congress leaped 422%.

Sincerely,



Patsy Silver
Managing Editor

1979 Henry Boswell Lecture Is Announced

Dr. Hans Weill of New Orleans will present the 1979 Henry Boswell Lecture at the Veterans Administration Medical Center in Jackson April 19.

The lecture is part of a pulmonary medicine intensive course and the annual Mississippi Thoracic Society meeting April 16-20 at the University of Mississippi Medical Center.

Dr. Weill is professor of medicine at Tulane University and director of the Specialized Center of Research of the National Heart, Lung and Blood Institute.

A past president of the American Thoracic Society, Dr. Weill has served on the Board of Directors of the American Lung Association. He is a fellow of the American College of Chest Physicians, and is a past Louisiana governor for the college.

The week-long pulmonary intensive course will include a review of current principles and practices in pulmonary medicine, emphasizing pulmonary function studies, arterial blood measurements and ventilatory management. Sponsors are the UMC School of Medicine, the Medical Center Division of Continuing Health Professional Education and the Mississippi Lung Association.

Eudora Welty Named Sight-Saving Chairman

The Mississippi Society to Prevent Blindness announces that Miss Eudora Welty will serve as 1979 Honorary Sight-Saving Chairman of Mississippi.

In accepting the chairmanship Miss Welty stated that she has very personal reasons for feeling strongly about the value of good eyesight and the importance of protecting it. She urges all Mississippians to guard and conserve their priceless vision and to support the programs of the society.

Miss Welty is a native Jacksonian educated at Millsaps College, Mississippi University for Women, the University of Wisconsin and Columbia. The internationally recognized writer was named a member of the American Academy of Arts and Letters, received the Gold Medal from the National Institute of Arts and Letters, and received the 1973 Pulitzer Prize for "*The Optimist's Daughter*."

The Mississippi Society to Prevent Blindness, a non-profit, voluntary health agency working solely in the prevention of blindness, derives support from contributions, memorials and bequests.

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Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, hypertensive crises may result.

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Drillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

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In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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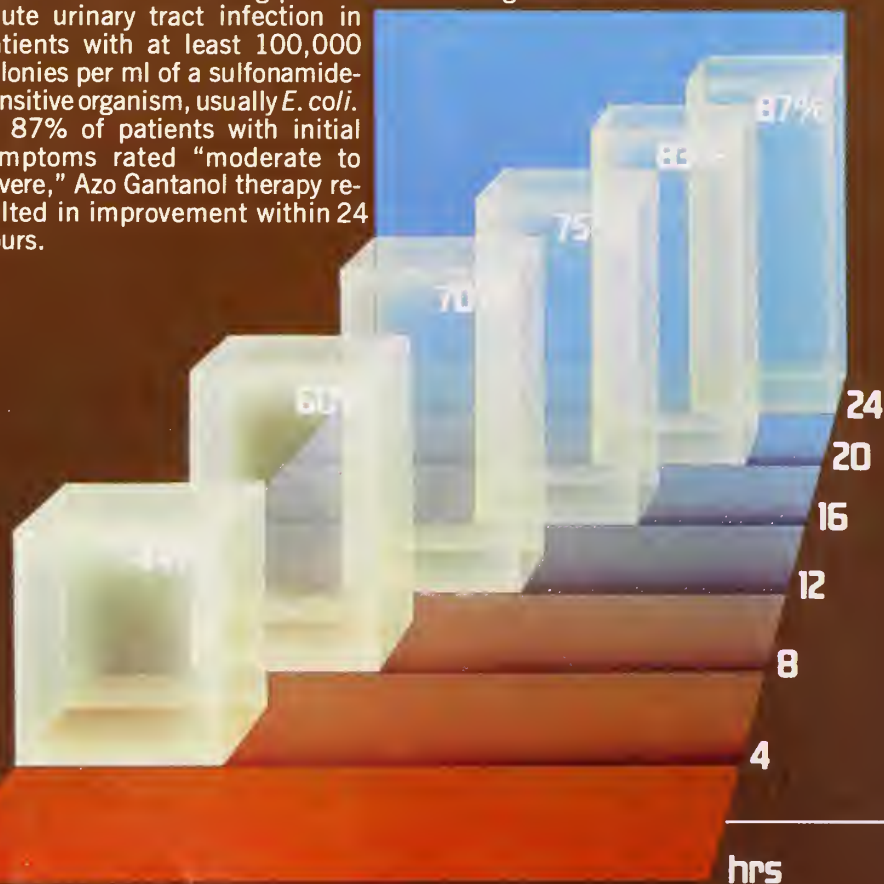


For prescribing information see opposite page

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for
the pathogens

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprolthrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.



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Internists Will Meet In New Orleans

The 23rd Annual Meeting of the American Society of Internal Medicine will take place April 26-29, 1979, at the Fairmont Hotel in New Orleans. Theme of this year's session is "Medicine and All That Jazz."

Special attention will be given to government regulations of technology during the Friday session, entitled "No Longer Left to Our Own Devices." Speakers will define regulation, discuss the proposed National Center for Health Care Technology, and examine the implications of technology transfer and health services research for the patient and physician. There will also be discussion of cost containment and manpower in relation to proposed health legislation.

Saturday's schedule calls for examination of advances in behavioral diseases, including such topics as "Biochemical Basis of Alcoholism," "Running as a Health Factor," "Pathophysiology of Obesity" and "Marijuana: Harmful or Not?" A program entitled "Lessons from Federal Systems" will examine the Canadian system of medical care, study the problems of military medicine and will feature a debate on the phasing out of the present VA health system. There will be an afternoon session on "Physicians and Hospitals: The Dynamics of Power."

The program is certified for eight hours of credit in Category 1 for the Physician's Recognition Award of the American Medical Association.

National Medical Lab Week Is This Month

The week of April 8-14, 1979 has been designated as National Medical Laboratory Week by the American Society of Medical Technologists. Purpose of the week is to recognize the medical laboratory professionals who provide a vital health service to the American public.

Professional personnel in the laboratory number over 150,000. These include pathologists, medical technologists, laboratory technicians, laboratory assistants and personnel in various scientific specialty areas.

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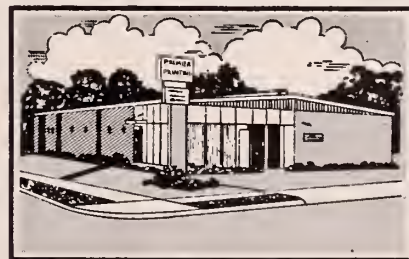
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DATELINE

MDs Not Exempt From Energy Plan

Washington, DC - Standby energy conservation and gas rationing plans submitted to Congress will not exempt physicians or their offices. Physicians would be expected to keep adequate levels of gasoline to meet all weekend needs if weekend sales are restricted, and if rationing became necessary, to purchase extra gas rations for additional (including patient care) needs. Physicians' offices would be subject to building temperature restrictions.

Arthritis Info Is Centralized

Bethesda, MD - A centralized system of information on arthritis has been established by NIH to provide physicians with the most up-to-date material and programs available for patient education. An estimated 31.6 million Americans suffer from arthritis and related diseases, and more than 5.4 million are disabled by the disease. Information is available from the Arthritis Clearinghouse, P. O. Box 34427, Bethesda, MD 20034.

Mexican Clinics Draw Mississippians

University, MS - Arthritis sufferers in Mississippi seem to be traveling more and more to Mexican clinics in search of a "wonder drug," says a University of Mississippi pharmacy professor, Dr. John K. Baker. Since 1970 he has analyzed drug samples sent from state pharmacists and physicians whose patients have been treated in Mexican clinics. In the last year, the number of samples he has been asked to analyze has increased markedly.

MD "Fraud" Charge Examined

Jackson, MS - A lawsuit charging several state physicians with filing fraudulent claims under Medicaid has received misleading publicity. The plaintiff, who has had difficulties with the State Board of Health in the past regarding such matters as practicing medicine without a license, alleges that the physicians did not properly register their licenses to practice medicine, were therefore unlicensed, and their medicaid claims were fraudulent. The Mississippi Medicaid Commission is not named in the suit.

TV Violence Affects Youngsters

Lexington, MA - The more violence a teenager sees on television, the more likely he is to be violent himself, concludes a two-year study conducted in London and funded by a \$290,000 grant from an American television network. The findings, published in a book titled Television Violence and the Adolescent Boy, reveal that frequent exposure to television violence increases the degree to which adolescent boys engage in aggressive behavior and violence.

Riverside.

Mississippi's Unique Psychiatric Hospital.

Riverside Hospital is unique in Mississippi.

As a privately owned 56-bed short term care facility for treating patients with psychiatric illness or emotional problems, it is the only hospital of its kind in the state.

Architecturally designed to create an attractive open environment, Riverside's "non-institutional" atmosphere helps prepare the patient for specific therapy, healthy entertainment and physical recreation.

The clinical program incorporates a wide range of modern psychiatric ideas. Emphasis is placed on interpersonal relationships, small group functions, and professional individualized care.

The Medical Staff includes a large number of physicians in private practice in the Jackson area. All are qualified and limit their practice to psychiatry.

Riverside is licensed by the Mississippi Commission on Hospital Care, and fully accredited by the Joint Commission on Accreditation of Hospitals.

For additional information contact: John R. Reedy, Executive Director.

Riverside Hospital

P.O. Box 4297, Jackson, MS 39216
Telephone: (601) 939-9030





Dyazide[®]

Each capsule contains 50 mg. of Dyrenium[®] (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Makes Sense in Hypertension^{*}

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

*** Warning**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. Dyazide[®] interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
a SmithKline company

Carolina, P.R. 00630

**When painful spasm
is the presenting
symptom...**



...in the functional bowel/irritable bowel syndrome*

Bentyl[®]

(dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

“The correlation of spasm relief and drug given was excellent.”

*This drug has been classified “probably” effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

Bentyl[®]

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FOA has classified the following indications as "probably" effective.

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension, loss of taste; headache, nausea, vomiting, drowsiness, weakness, dizziness, insomnia; nausea, vomiting, impotence; suppression of lactation; constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup. Adults: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. Children: 1 capsule or teaspoonful syrup three or four times daily. Infants: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: Adults: 1 tablet three or four times daily. Bentyl Injection: Adults: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine[®] (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

AOA Hosts Visiting Professor

Endocrinologist Dr. Grant W. Liddle was at the University of Mississippi Medical Center in March as Alpha Omega Alpha visiting professor.

Dr. Liddle, professor of medicine and chairman of the department at Vanderbilt University School of Medicine, is president of the International Society of Endocrinology. He is past president of the Endocrine Society and recipient of its Distinguished Leadership Award. A past president of the Southern Society for Clinical Investigation, he received that organization's Founders Medal in 1977.

Dr. Liddle is a fellow in the American College of Physicians and earned the college's John Phillips Memorial Award in 1977. He has served as president of the American Society for Clinical Investigation, the Nashville Society for Internal Medicine, and the Association of Professors of Medicine.

A member of the editorial board of the *Journal of Clinical Endocrinology and Metabolism* and the *Journal of Clinical Investigation*, Dr. Liddle is the author of more than 200 contributions to scientific journals.

Report Condemns Sleep Aids

Over-the-counter sleep preparations are not effective as sleep aids, are quite toxic and should be removed from the consumer market, according to an article in the March issue of JACEP, the journal published by the American College of Emergency Physicians and the University Association for Emergency Medicine.

A review of 155 poison cases at the Rocky Mountain Poison Center in Denver, CO, during an eighteen month period, revealed that the three most common sleep aids involved in the poisonings were Sominex, Nytol and Sleepeze, all of which contain varying amounts of scopolamine, methapyrilene and salicylamide. The report stated that ingestion of as few as 15 Sleepeze, 16 Sominex or 18 Nytol was enough to produce life-threatening symptoms.

The reports of the study corroborate the Food and Drug Administration's 1975 recommendation that over-the-counter sleep aids be taken off the market.

Barry H. Rumack, M.D., director of the Rocky Mountain Poison Center, was one of the authors of the article. Dr. Rumack is also the editor of Poisindex, a microfiche information service of commercial product formularies cross-referenced with recommended treatments for poisonings.

Merrell

MERRELL NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Times Change!

Yesterday's methods of protection are long outmoded and today's methods may well prove inadequate tomorrow.

The active and involved physician has to rely on comprehensive insurance programs tailored to fit the day-to-day special needs of his profession.

One of these special needs is *Malpractice* insurance. MMFES is a non-profit Mississippi Corporation sponsored by the Mississippi State Medical Association and directed by Mississippi physicians. MMFES offers comprehensive coverage on three types of Malpractice insurance policies and it'll probably cost you less than other plans.

Mike Houpt is aware of this special need. Give Mike a call toll free at 1-800-682-6415 or 944-0072. He would welcome the opportunity to hear from you.



MISSISSIPPI MEDICAL FRATERNAL AND EDUCATIONAL SOCIETY

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PROTECTION

ACKNOWLEDGEMENT

Edward A. Attix, M.D. and Mary A. Tate, R.P.T., authors of the article "Establishing a Low Back School," in the January issue of JOURNAL MSMA (page 4), wish to acknowledge their great debt to Dr. and Mrs. Arthur White, William Mattmiller and all others associated with the California Back School, 4141 Geary Boulevard, San Francisco, CA. The concepts presented in the article were originated by them and adapted by the authors to their own environment.

ER Test Avoids Unnecessary Costs

A patient entering an emergency department with deep chest pain and pain in the lower extremities could expect lengthy hospital stays and tests costing over \$1,000 before a diagnosis was possible.

That is no longer the case, claims a study published in the March issue of JACEP, the clinical journal of the American College of Emergency Physicians and the University Association for Emergency Medicine.

With an overall accuracy of 95%, two Michigan physicians have determined that noninvasive venous impedance testing in the emergency department is not only effective for screening patients in high-risk categories for venous thromboembolic disease, but is also cost-effective. The impedance test can screen symptomatic patients for the disease for under \$50.

Records of 160 emergency room patients with lower extremity complaints were reviewed to determine the economic and therapeutic impact of the noninvasive flow test. Venograms obtained in 86 extremities were then used to determine diagnostic accuracy. The outflow impedance testing correctly identified all patients with deep venous thrombosis.

Lead author William S. Gross, M.D., of Southfield, MI, explains that conventional testing modes require hospitalization and are still necessary to identify the exact source of a clot detected by the impedance testing. But, "Avoiding the unnecessary costs to determine the disease is our objective," Dr. Gross said in support of the emergency department test protocol.

Librax®

Each capsule contains 5 mg
chlordiazepoxide HCl and 2.5 mg clidinium Br.

Please consult complete prescribing information, a summary of which follows:

Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

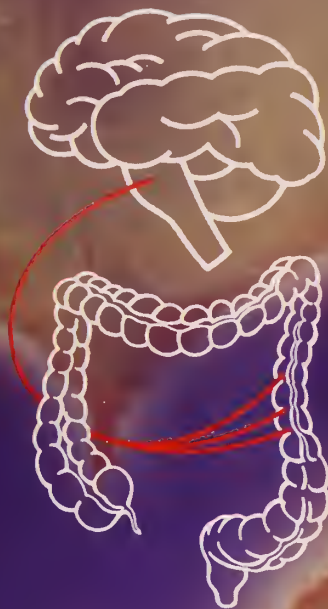
As with all anticholinergics, inhibition of lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment, blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

Roche Products Inc.
Manati, Puerto Rico 00701



In treating irritable bowel syndrome*
Enhance your therapeutic expectations
with

Librax[®]

Each capsule contains
5 mg chlordiazepoxide HCl
and 2.5 mg clidinium Br.

antianxiety/antispasmodic/antimotility

Librax is unique among G.I. medications in providing the specific antianxiety action of LIBRIUM[®] (chlordiazepoxide HCl) as well as the potent antispasmodic and antimotility actions of QUARZAN[®] (clidinium Br) for adjunctive therapy of irritable bowel syndrome.



*Librax has been evaluated as possibly effective for this indication.
Please see brief summary of prescribing information on preceding page.



The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions.

However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).



Motrin[®] 400 mg TABLETS

ibuprofen, Upjohn

The confidence that comes from experience—
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001

The confidence that comes from experience—
one more reason to prescribe

Motrin[®] 400 mg TABLETS

ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. Aspirin used concomitantly may decrease Motrin blood levels. Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

How Supplied

Motrin Tablets, 300 mg (white)

Bottles of 60

NDC 0009-0733-01

Bottles of 500

NDC 0009-0733-02

Motrin Tablets, 400 mg (orange)

Bottles of 60

NDC 0009-0750-01

Bottles of 500

NDC 0009-0750-02

Unit-dose package of 100

NDC 0009-0750-06

Unit of Use bottles of 120

NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.

NIM-3



MSD
MERCK
SHARP
DOHME

ALDOMET[®]
(METHYLDOPA/MSD)

TABLETS: 500 mg, 250 mg, and 125 mg

Upjohn

The Upjohn Company
Kalamazoo, Michigan 49001

ORIGINAL PAPERS

Radiologic Seminar CXC: Stress Films in Acute Trauma

CHARLES A. RAY, III
Meridian, Mississippi

ROUTINE STRESS films are valuable in cases of acute trauma to a joint in children and adolescents.

Case Report

A 15-year-old white male was seen in the emergency room approximately an hour following an injury sustained while playing basketball. The injury was described as a "twisting injury with inward bowing of the knee." On examination, there was a moderately large effusion with medial tenderness and instability.

The original radiographs (see Figure 1) reveal a joint effusion with a small avulsion fracture of the lateral margin of the proximal tibial epiphysis. No displacement of the fracture or other significant abnormality was noted. Valgus stress films were obtained (see Figure 2), which revealed prominent widening of the epiphyseal growth plate on the medial side. The medial joint space was intact.

The above case strongly illustrates the value of routine stress films in cases of acute trauma to the



Figure 1

Sponsored by the Mississippi Radiological Society.

RADIOLOGIC SEMINAR / Ray

knee where soft tissue and ligamentous injury is suspected. In this case the original clinical impression was that of medial joint instability most probably due to medial collateral ligament disruption. However, as is the case in many growing bones, the ligamentous structures are oftentimes more resistant to injury than the epiphyseal growth plate. Obviously, the treatment in these two entities is quite different, and therefore, the correct diagnosis is imperative. The use of stress films, as well as comparison radiographs of the opposite extremity, should be strongly considered in the evaluation of acute trauma to a joint in children and adolescents. ★★★

2124 14th Street (39301)



Figure 2

Seminars — 111th Annual Session

Sunday

“Practice Management” — Clinic Managers Association

Monday

“Diseases of the Stomach” — Mississippi Gastrointestinal Association

Tuesday

“Medical Audit” — Mississippi Foundation for Medical Care

Wednesday

“Urology for the Family Practitioner” — Mississippi Urological Association

111th Annual Session

Mississippi State Medical Association

May 6-10, 1979

Biloxi

Finalized plans for the association's 111th Annual Session reveal a full schedule of activities which will take place when the session gets underway on Mississippi's sunny Gulf Coast May 6-10, 1979. Host hotel is the Biloxi Hilton.

The five-day meet will feature programs conducted by 14 scientific sections, meetings of specialty societies, technical and scientific exhibits, meetings of the House of Delegates, and four special seminars. Additionally, various medical-related groups have scheduled meetings, and three medical alumni societies have announced plans for reunions. Completing the list of activities are the annual tennis tournament and numerous social occasions.

Dr. J. Elmer Nix, chairman of the Council on Scientific Assembly, announces that many outstanding speakers, including 18 from out of state, will participate in the Scientific Program which opens on Sunday and continues through Wednesday. The Scientific Program is accredited for 17 hours Category 1 credit toward the AMA Physician's Recognition Award. Seventeen hours of credit have been requested from the American Academy of Family Physicians.

The House of Delegates, meeting initially on Monday morning, will hear an address by Dr. Carl G. Evers, MSMA president. House Speaker Dr. R. Faser Triplett of Jackson and vice speaker Dr. Walter H. Rose of Indianola announce that delegates will receive their complete House of Delegates folders prior to the convention.

Principal speaker for the annual session is Dr. Hoyt D. Gardner of Louisville, KY, president-elect of the AMA. He is slated to address the opening meeting of the House of Delegates. The final meeting of the House on Thursday will see the completion of association business. Dr. Gerald P. Gable of Hattiesburg will be inaugurated president of the association for the new year during closing ceremonies.

OFFICIAL CALL

To all members of the Mississippi State Medical Association:

The 111th Annual Session of the Mississippi State Medical Association is called to meet at Biloxi, Mississippi, on Sunday, May 6, 1979, pursuant to Article V of the Constitution. The House of Delegates will be convened at 9:30 a.m. in the morning at the Biloxi Hilton on May 7.

The Scientific Assembly consisting of the 14 general sessions, will meet during May 6-9, 1979.

No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

CARL G. EVERS
PRESIDENT

J. ELMER NIX
SECRETARY-TREASURER

Four special seminars are scheduled for the convention. On opening day, a seminar on "Practice Management" will be conducted by Clinic Managers Association. A genitourinary seminar, "Urology for the Family Practitioner," sponsored by the Mississippi Urologic Society, is set for Wednesday afternoon with a cocktail party afterward. A seminar entitled "Diseases of the Stomach" will be conducted by the Mississippi Gastrointestinal Association on Monday. "Medical Audit" will be the subject of a Tuesday seminar sponsored by the Mississippi Foundation for Medical Care.

111TH ANNUAL SESSION / Continued

The annual membership meeting of the Mississippi Medical Fraternal and Educational Society is set for Sunday afternoon and the annual meeting of the Mississippi Perinatal Association will take place on Tuesday.

The MSMA Auxiliary will conduct its 56th Annual Session during May 6-9, with headquarters at the Biloxi Hilton. The Tuesday General Session and luncheon will be held at the Broadwater Beach Hotel. According to Mrs. G. S. Rowlett, Jr. of Vicksburg, auxiliary president, convention chairmen have planned special activities. There will be a demonstration on plant care, with door prizes, on Monday and a gumbo demonstration Wednesday. Convention chairmen are Mrs. I. C. Knox, Jr. of Vicksburg, general chairman; Mrs. James B. Martin of Ocean Springs, registration; Mrs. Jerry T. Russell and Mrs. George E. Abraham, III, both of Vicksburg, luncheon. Mrs. Jim C. Barnett of Brookhaven will be installed as 1979-80 president.

Medical alumni groups from Tulane, University of Tennessee and Ole Miss have set reunions for Monday. The annual MSMA fellowship party is planned for Tuesday evening. Tickets for this event will be available at MSMA Registration.

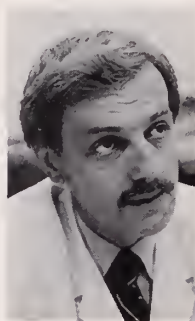
Scientific and technical exhibits will be on display at the Grand Casino Hall, where a complimentary sandwich and beer bar will be open daily from 11:00 a.m. to 2:30 p.m.

For room reservations, contact the Biloxi Hilton, 3580 West Beach Boulevard, Biloxi, MS 39531.

SPECIAL ACTIVITIES

- 14 Scientific Sections
- 4 Seminars
- Alumni Reunions
- Fellowship Occasions
- Tennis Tournament

STATE OFFICERS 1978-1979



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CARL G. EVERS
Jackson



DR. GABLE

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GERALD P. GABLE
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MRS. BARBARA SHELTON, Membership Director
MRS. BETH HAMILTON, Secretary

LIVING PAST PRESIDENTS

LAMAR ARRINGTON, Meridian	1952-53
S. LAMAR BAILEY, Kosciusko	1955/56
HOWARD A. NELSON, Greenwood	1957-58
GUY T. VISE, Meridian	1958-59
STANLEY A. HILL, Corinth	1959-60
G. SWINK HICKS, Natchez	1960-61
LAWRENCE W. LONG, Jackson	1961-62
C. P. CRENSHAW, Collins	1962-63
OMAR SIMMONS, Newton	1964-65
EVERETT CRAWFORD, Tylertown	1965-66
JAMES T. THOMPSON, Moss Point	1966-67
TEMPLE AINSWORTH, Jackson	1967-68
JOSEPH B. ROGERS, Biloxi	1968-69
JAMES L. ROYALS, Jackson	1969-70
PAUL B. BRUMBY, Lexington	1970-71
CHARLES R. JENKINS, Laurel	1972-73
ARTHUR A. DERRICK, JR., Durant	1973-74
J. T. DAVIS, Corinth	1974-75
JACK A. ATKINSON, Brookhaven	1975-76
LYNE S. GAMBLE, Greenville	1976-77
JAMES O. GILMORE, Oxford	1977-78

REGISTRATION

General Registration for the Scientific Assembly and House of Delegates will be located on First Level near the Grand Ballroom. No person may be admitted to any activity of the annual session without first registering. **There will be a registration fee of \$50.00 for nonmember physicians except interns and residents.** Hours of registration will be 8:00 a.m. to 4:00 p.m., Sunday, May 6; 8:00 a.m. to 4:30 p.m., Monday, Tuesday and Wednesday, May 7, 8, and 9; and 8:00 a.m. to 9:00 a.m., Thursday, May 10.

ACTIVITIES CALENDAR

SUNDAY, MAY 6, 1979

- 8:00 a.m. Mississippi Society of Anesthesiologists Breakfast, Sands
- 8:00 a.m. Mississippi Neurosurgical Society Breakfast, Pacific
- 9:00 a.m. MSMA Scientific Meeting — Section on Anesthesiology, Dunes
- 9:00 a.m. MSMA Scientific Meeting — Section on Pathology, Stardust
- 9:00 a.m. MSMA Scientific Meeting — Section on Orthopedic Surgery, Atlantic
- 10:00 a.m. MSMA Scientific Meeting — Section on Psychiatry, Caribbean
- 12:00 noon Mississippi Orthopedic Society Luncheon, Sands
- 12:00 noon Mississippi Psychiatric Association Luncheon, Atlantic
- 12:30 p.m. Mississippi Association of Pathologists Luncheon, Pacific
- 1:00 p.m. MSMA and Clinic Managers Association Practice Management Seminar, Crystal
- 3:00 p.m. Mississippi Medical Fraternal and Educational Society Inc., Annual Membership Meeting, Emerald
- 3:00 p.m. MSMA Auxiliary Finance Committee, Caribbean
- 5:30 p.m. MSMA President's Reception, Crystal and Topaz Rooms

MONDAY, MAY 7, 1979

- 8:00 a.m. MSMA Reference Committee Breakfast, Atlantic
- 8:00 a.m. MSMA Auxiliary Orientation Breakfast, Sands
- 9:30 a.m. MSMA House of Delegates, Crystal and Topaz Rooms
- 10:00 a.m. Mississippi Commission on Hospital Care Meeting, Pacific
- 12:00 noon Flying Physicians Association Luncheon, Caribbean
- 1:00 p.m. Mississippi Foundation for Medical Care, Inc., Annual Membership Meeting, Crystal and Topaz Rooms

ACTIVITIES CALENDAR / Continued

- 2:00 p.m. MSMA Reference Committee on Reports of Officers, Board of Trustees and Councils, Pacific
- 2:30 p.m. MSMA Auxiliary Preconvention Board Meeting, Stardust
- 3:30 p.m. MSMA Reference Committee on Constitution and By-Laws, Atlantic
- 3:30 p.m. MSMA Auxiliary Coffee and Plant Care Demonstration, Sands
- 4:00 p.m. Gastrointestinal Seminar, Caribbean
- 4:00 p.m. Ole Miss Medical Alumni Business Meeting, Dunes
- 5:30 p.m. Mississippi Foundation for Medical Care Board of Directors Meeting, Pacific
- 5:30 p.m. Tulane University Medical Alumni Reception, Atlantic
- 6:00 p.m. University of Tennessee Medical Alumni Reception, Stardust
- 7:00 p.m. Ole Miss Medical Alumni Seafood Jamboree and Dance, Grand Ballroom

TUESDAY, MAY 8, 1979

- 7:00 a.m. American College of Surgeons, Mississippi Chapter, Officers Breakfast, Caribbean
- 7:30 a.m. American College of Surgeons, Cancer Liaison Fellows Breakfast, Atlantic
- 9:00 a.m. American College of Surgeons, Mississippi Chapter, Scientific Meeting, Crystal
- 9:00 a.m. MSMA Scientific Meeting — Section on Medicine, Stardust
- 9:00 a.m. Mississippi Perinatal Association Meeting, Pacific
- 9:00 a.m. MSMA Auxiliary General Session, Coronet Room, Broadwater Beach Hotel
- 11:30 a.m. Mississippi Chapter, American College of Pediatrics Luncheon, Caribbean
- 12:00 noon Mississippi Society of Internal Medicine Luncheon, Atlantic
- 12:00 noon American College of Surgeons, Mississippi Chapter, Luncheon, Dunes

- 1:00 p.m. MSMA Auxiliary Luncheon, Crown Room, Broadwater Beach Hotel
- 1:30 p.m. MSMA Scientific Meeting — Section on Pediatrics, Emerald
- 1:30 p.m. MSMA Scientific Meeting — Section on Surgery, Crystal
- 1:30 p.m. MSMA Scientific Meeting — Section on Radiology, Pacific
- 1:30 p.m. Mississippi Foundation for Medical Care Medical Audit Seminar, Sands
- 4:00 p.m. MSMA Auxiliary Postconvention Board Meeting, Caribbean
- 6:30 p.m. MSMA Fellowship Party, Sandpiper Terrace

WEDNESDAY, MAY 9, 1979

- 7:30 a.m. Academy of Facial Plastic and Reconstructive Surgery Breakfast Meeting, Caribbean
- 7:30 a.m. MSMA Past Presidents' Breakfast, Atlantic
- 7:30 a.m. Ob-Gyn Educational Advisory Committee, Breakfast, Cafe Royale
- 9:00 a.m. MSMA Scientific Meeting — Section on EENT, Topaz
- 9:00 a.m. MSMA Scientific Meeting — Section on Family Practice, Emerald
- 9:00 a.m. MSMA Scientific Meeting — Section on Ob-Gyn, Stardust
- 9:00 a.m. MSMA Auxiliary Past Presidents' Breakfast, Pacific
- 10:30 a.m. MSMA Auxiliary Coffee and Gumbo Demonstration, Dunes
- 11:00 a.m. MSMA Nominating Committee Meeting, Atlantic
- 11:30 a.m. Mississippi Dermatological Society Luncheon, Caribbean
- 12:00 noon Mississippi EENT Association Luncheon, Sands
- 12:00 noon MSMA Fifty Year Club Luncheon,
- 12:00 noon Mississippi Academy of Family Physicians Luncheon, Crystal
- 12:00 noon Mississippi Ob-Gyn Society Luncheon, Cafe Royale
- 1:00 p.m. MSMA Tennis Tournament
- 1:00 p.m. Mississippi Urological Society Genitourinary Seminar for the Family Practitioner, Dunes

- 1:30 p.m. MSMA Scientific Meeting — Section on Dermatology, Stardust
- 1:30 p.m. MSMA Scientific Meeting — Section on Preventive Medicine, Emerald
- 3:00 p.m. MSMA Scientific Meeting — Section on Urology, Dunes
- 3:30 p.m. Short Course in Tonometry, Pacific
- 5:00 p.m. Mississippi Dermatological Society Cocktail Party, Caribbean
- 5:15 p.m. Mississippi Urological Society Cocktail Party, Atlantic
- 7:00 p.m. Mississippi Urological Society Dinner, Sands

THURSDAY, MAY 10, 1979

- 9:00 a.m. MSMA House of Delegates, Crystal and Topaz Rooms

EXECUTIVE BUSINESS



DR. TRIPLETT

Speaker
R. Faser Triplett
Jackson



DR. ROSE

Vice Speaker
Walter H. Rose
Indianola

HOUSE OF DELEGATES

May 7, 1979, 9:30 a.m.
Crystal and Topaz Rooms
Biloxi Hilton

MEETINGS OF THE HOUSE OF DELEGATES

The opening meeting of the House will be called to order by the President, and the Speaker will announce the order of business. An open meeting on May 7, to which all MSMA members and Auxiliary members are invited, will feature addresses by Dr. Carl G. Evers, the President of MSMA and Dr. Hoyt D. Gardner, president-elect of the American Medical Association. The adjourned meeting of the House will convene at 9:00 a.m. on May 10.



DR. GARDNER

REFERENCE COMMITTEES

- Reports of Officers, Trustees and Councils, May 7, 2:00 p.m., Pacific Room
- Constitution and By-Laws, May 7, 3:30 p.m., Atlantic
- Nominating Committee, May 9, 11:00 a.m., Atlantic

SCIENTIFIC AND TECHNICAL EXHIBITS

Grand Casino, Biloxi Hilton

THE SCIENTIFIC EXHIBIT

Physicians, foundations, organizations and major medical institutions will present the Scientific Exhibit. Physicians are eligible for the Aesculapius Awards given for excellence of presentation, quality of content, and originality. The Scientific Exhibit is located in the Grand Casino Hall of the Biloxi Hilton.

EXHIBITS AND AUTHORS

People Helping People

American Heart Association — MS Affiliate
The Navicular Staple for Selected Fractures and Nonunions

W. C. Warner, A. E. Freeland, J. C. McAndrew, University Medical Center, Department of Orthopedic Surgery, Jackson, MS

Treatment of Selected Fractures with the Wagner Apparatus — a Portable Traction Device

James L. Hughes, Heinz Wagner, E. Frazier Ward, Charles S. Rhea, University Medical Center, Department of Orthopedic Surgery, Jackson, MS

Surgical Lesions of the Thoracic Aorta

T. L. Kilgore and M. H. McMullan, Surgical Clinic, Jackson, MS

Cardiac Rehabilitation

John Wofford; G. F. Beissel, Ph.D.; Ms. Linda Grant; Ms. Janet Brumfield; Ms. Gail Russell; Ms. Lucille Oats; Miss. Methodist Hospital & Rehabilitation Center, Jackson, MS

Dissecting Aneurysm of the Ascending Aorta — Diagnosis and Surgical Therapy

Jefferson F. Hollingsworth, Henry B. Tyler, James L. Crosthwait, Quinton Dickerson, James C. Hays, W. Arthur Jones, George K. McMullan, Thomas D. Paine, William H. Rosenblatt, Mississippi Heart Institute-St. Dominic Hospital, Jackson, MS

EXHIBITS / Continued

Family Health Services

Ms. Judy Tudor — Community Representative, Jackson, MS

Disability Under Social Security

Mr. Ed Adams, Professional Relations Officer, State Disability Determination Services, Jackson, MS

Repair of Ventricular Septal Defect in Infancy

Fred A. Crawford, Bobby Heath, David Watson, James Joransen, University Medical Center, Jackson, MS

Non-Invasive Vascular Technique

Seshadri Raju and James D. Hardy, Department of Surgery, University Medical Center, Jackson, MS

Prevent Blindness

Mississippi Society for Prevention of Blindness

Establishing a Low Back School

Edward A. Attix and Ms. Mary A. Tate, Hattiesburg, MS

Hospice Care for the Terminally Ill

Edward M. Lowicki, Jackson, MS

Mitral Prolapse in Childhood and Adolescence: A Usually Benign But Common Cardiac Lesion

Robert F. Castle, Mississippi Heart Institute — St. Dominic Hospital, Jackson, MS

Results of Experimental and Clinical Studies of Porous High Density Polyethylene Coatings for Cement Free Fixation of Joint Prostheses

Barry W. Sauer, D.V.M. and Renate B. Lade, Dr. Med. Vet., Division of Orthopedic Surgery, University Medical Center and Emmett M. Lunceford, M.D., The Moore Clinic, Columbia, SC

THE TECHNICAL EXHIBIT

The Mississippi State Medical Association presents with pride the 1979 Technical Exhibit. Established firms engaged in the manufacture and distribution of pharmaceuticals, supplies or equipment, and in providing varied services, will present the exhibits. Visit each exhibit often and discuss products and services with the Professional Service Representatives. Only registered members and guests are admitted. The technical exhibit is located in the Grand Casino of the Biloxi Hilton.

EXHIBITORS

Ames Division, Miles Laboratories, Inc., Elkhart, IN

Ayerst Laboratories, New York, NY

Bedsole Surgical Supply Co., Mobile, AL

Blue Cross & Blue Shield of MS, Inc., Jackson, MS

Boehringer Ingelheim Ltd., Ridgefield, CT

Bristol Laboratories, Syracuse, NY

CIBA Pharmaceutical Company, Arlington, TX

Commerce General Corporation, Memphis, TN

Deposit Guaranty National Bank, Jackson, MS

Dista Products Company, Indianapolis, IN

Family Health Services, Jackson, MS

Filing Equipment, Inc., Chattanooga, TN

First National Bank, Jackson, MS

General Medical, Jackson, MS

Healthco, Jackson, MS

The Jobst Institute, Toledo, OH

Johnson & Johnson Dermatological Division, New Brunswick, NJ

Kremser-Urban Company, Milwaukee, WI

Lanier Business Products, Jackson, MS

Mallinckrodt, Inc., St. Louis, MO

Mead Johnson Pharmaceutical Division, Evansville, IN

Merck Sharp & Dohme, West Point, PA

Meyer Laboratories, Fort Lauderdale, FL

Mississippi Medical Fraternal & Education Society, Jackson, MS

Navy Recruiting, Memphis, TN

Niagara Therapy Manufacturing Corporation, Metairie, LA

Olympus Corporation, Kenner, LA

Pennwalt Rx Division, Rochester, NY

Pfizer Laboratories, Doraville, GA

Wm. P. Poythress & Company, Inc., Richmond, VA

Professional Planning Associates, Jackson, MS

A. H. Robins Company, Richmond, VA

Sandoz Pharmaceuticals, E. Hanover, NJ

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Smith Kline & French Laboratories, Philadelphia, PA

South Central Bell Marketing, Jackson, MS

St. Paul Fire and Marine Insurance Co., St. Paul, MN

Systemedics/AMS, Laurel, MS

The Travelers Insurance Company, Jackson, MS

U.S. Air Force Medical Team, New Orleans, LA

U.S. Army Medical Department, New Orleans, LA

USV Laboratories, Tuckahoe, NY

Warren-Teed Laboratories, Columbus, OH

Weight Watchers, Jackson, MS

Wyeth Laboratories, Philadelphia, PA

SCIENTIFIC GRANTS

The Mississippi State Medical Association is grateful to the following companies for their financial support of the 111th Annual Session.

Abbott Laboratories, Chicago, IL
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Special Sponsorship —
President's Reception
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VISIT THE EXHIBITS

Grand Casino

Complimentary beer and
sandwich bar

11:30 a.m.-2:30 p.m. daily

THE SCIENTIFIC ASSEMBLY

COUNCIL ON SCIENTIFIC ASSEMBLY

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DR. NIX

THE COUNCIL

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JERRY R. ADKINS, Secretary

Radiology

REBECCA HARRELL, Chairman

SANDRA RHODEN, Secretary

Urology

TOXEY MORRIS, Chairman

RONALD L. BROWN, Secretary

SCIENTIFIC ASSEMBLY

Program is acceptable for 17 prescribed hours by the American Academy of Family Physicians and 17 hours Category I credit toward AMA Physician's Recognition Awards.

SCIENTIFIC PROGRAM— Section on Anesthesiology

Sunday, May 6, 1979
Dunes Room
Beginning at 9:00 a.m.

Dexter C. Nettles, Jackson
Chairman
David I. Carlson, Jackson
Secretary



DR. NETTLES

SHORT COURSE IN:

NARCOTICS AND NARCOTIC ANTAGONISTS

F. Joe Dannemiller, chairman, Department of Anesthesiology, Wilford Hall USAF Medical Center, Lackland AFB, San Antonio, Texas

SCIENTIFIC PROGRAM— Section on Pathology

Sunday, May 6, 1979
Stardust Room
Beginning at 9:00 a.m.

Allen M. Read, Natchez
Chairman
Wm. B. Wilson, Jackson
Secretary



DR. READ

SHORT COURSE IN:

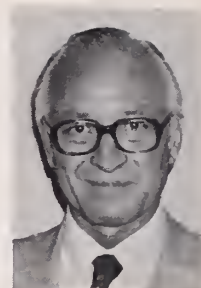
PROBLEMS IN FORENSIC PATHOLOGY AND THE MISSISSIPPI MEDICAL EXAMINER, REVIEW OF DUTIES

Faye G. Spruill, deputy chief medical examiner, St. Louis City, MO, asst. professor, Department of Forensic and Environmental Pathology, St. Louis University School of Medicine

SCIENTIFIC PROGRAM— Section on Orthopedic Surgery

Sunday, May 6, 1979
Atlantic Room
Beginning at 9:00 a.m.

R. Houston Franks, Tupelo
Chairman
George W. Wharton, Jackson
Secretary



DR. FRANKS

SHORT COURSES IN:

THE WEISS SPRINGS IN STABILIZATION OF SPINAL FRACTURES
Marion Weiss, Warsaw, Poland

PERIPHERAL NERVE INJURIES
Morton Spinner, Brookdale Hospital Medical Center, Brooklyn, NY

SCIENTIFIC PROGRAM— Section on Psychiatry

Sunday, May 6, 1979
Caribbean Room
Beginning at 10:00 a.m.

G. Howard Freeman, Meridian
Chairman
Glen Anderson, Jackson
Secretary



DR. ANDERSON

SHORT COURSES IN:

CURRENT TRENDS IN GERIATRIC PSYCHIATRY
Fred B. Charatan, Syosset, NY

PANEL DISCUSSION: WHAT IS A PSYCHIATRIST?

SCIENTIFIC PROGRAM— Section on Medicine

Tuesday, May 8, 1979
Stardust Room
Beginning 9:00 a.m.

W. Mack Gorton, Belzoni
Chairman
Don Q. Mitchell, Jackson
Secretary



DR. GORTON

SHORT COURSES IN:

THERAPY OF PEPTIC ULCER: AN UPDATE

Charles T. Richardson, chief of gastroenterology, V. A. Hospital, Dallas, TX and associate professor of internal medicine, University of Texas, Southwestern Medical School, Dallas

NEW DRUGS IN THE TREATMENT OF ARTHRITIS

O. Edwin McClusky, Tyler, TX

THE TREATMENT OF HEMATOLOGICAL MALIG- NANCIES: AN UPDATE

Francis S. Morrison, Jackson

PRE-OPERATIVE PULMONARY EVALUATION AND POST-OPERATIVE CARE

Barry L. Whites, Jackson

SCIENTIFIC PROGRAM— Section on Pediatrics

Tuesday, May 8, 1979

Emerald Room

Beginning 1:30 p.m.

R. Ray Lyle, Starkville
Chairman

Robert H. Thompson, Jackson
Secretary



DR. LYLE

SHORT COURSES IN:

TYMPANOMETRY

Virgil M. Howie, professor, Department of Pediatrics, University of Texas Medical Branch, Galveston

VENTILATION TUBES — THE CURRENT STATUS

J. George Smith, Jackson

UPDATE ON URINARY TRACT INFECTION IN CHILDHOOD

James E. Keeton, Jackson

SCIENTIFIC PROGRAM— Section on Radiology

Tuesday, May 8, 1979

Pacific Room

Beginning at 1:30 p.m.

Rebecca Harrell, Jackson
Chairman

Sandra Rhoden, Jackson
Secretary



DR. HARRELL

APRIL 1979

SHORT COURSES IN:

THE BARIUM ENEMA — IS IT OBSOLETE?

Roscoe E. Miller, Department of Radiology, Indiana University Medical Center, Indianapolis

HYPOTONIC RADIOGRAPHY WITH GLUCAGON

Roscoe E. Miller, Indianapolis

SCIENTIFIC PROGRAM Section on Surgery

Tuesday, May 8, 1979

Crystal Room

Beginning at 1:30 p.m.

Charles E. Guice, Hattiesburg
Chairman

Jerry R. Adkins, Biloxi
Secretary



DR. GUICE

SHORT COURSES IN:

DIAGNOSIS AND MANAGEMENT OF POSTOPERA- TIVE AZOTEMIA

Philip W. Rogers, Hattiesburg

ADVANCED BLOOD GAS ANALYSIS FOR THE SUR- GEON

John E. Forestner, Jackson

PANEL DISCUSSION ON G. I. BLEEDING

Charles E. Guice, Hattiesburg, Moderator
James M. Martin, Hattiesburg, J. Harvey Johnston, Jackson, W. Briggs Hopson, Vicksburg, and James L. Achord, Jackson, panel members

SCIENTIFIC PROGRAM— Section on EENT

Wednesday, May 9, 1979

Topaz Room

Beginning at 9:00 a.m.

Kenneth N. Reed, Jackson
Chairman

W. Joseph Burnett, Oxford
Secretary



DR. REED

SCIENTIFIC PROGRAMS / Continued

SHORT COURSES IN:

SCULPTURING THE NASAL TIP IN RHINOPLASTY
M. Eugene Tardy, Jr., associate professor of
Otolaryngology, University of Illinois,
Chicago

COMPLICATIONS OF THE MUSTARDE' FLAP
SILICONE INTUBATION OF THE CANALICULI
Michael A. Callahan, Birmingham, AL

SCIENTIFIC PROGRAM— Section on Ob-Gyn

Wednesday, May 9, 1979
Stardust Room
Beginning at 9:00 a.m.

Kenneth P. Pittman, Jackson
Chairman
Wm. L. Kahlstorf, Tupelo
Secretary



DR. PITTMAN

SHORT COURSES IN:

GOVERNMENTAL MEDICINE — THE WATCHDOG
THAT BEARS WATCHING (CAN REGIONALIZA-
TION HELP?)

John C. Morrison, associate professor, De-
partment of Ob-Gyn, University of Tennessee
Center for the Health Sciences, Memphis

PREVENTION OF POSTMENOPAUSAL OSTEO-
POROSIS

Gilbert S. Gordan, professor, Department of
Medicine, University of California, San Fran-
cisco

SCIENTIFIC PROGRAM— Section on Family Practice

Wednesday, May 9, 1979
Emerald Room
Beginning at 9:00 a.m.

Wm. H. Spragins, Hollandale
Chairman
Gene E. Crick, Minter City
Secretary



DR. SPRAGINS

SHORT COURSES IN:

TREATMENT UPDATE ON COMMONLY ENCOUN-
TERED SKIN DISEASES

Louis J. Wise, Jr., Jackson

SCOLIOSIS

Hugh P. Brown, Jackson

ANTIBIOTICS — OLD AND NEW

Charles V. Sanders, Jr., associate professor and
head, Section on Infectious Diseases, Depart-
ment of Internal Medicine, Louisiana State
University School of Medicine, New Orleans

GENERAL GASTROENTEROLOGY UPDATE

James L. Achord, Jackson

SCIENTIFIC PROGRAM— Section on Dermatology

Wednesday, May 9, 1979
Stardust Room
Beginning at 1:30 p.m.

James N. McQueen, Jackson
Chairman
Thomas C. Garrott, Biloxi
Secretary



DR. MCQUEEN

SHORT COURSES IN:

SKIN SIGNS OF SYSTEMIC ILLNESS

Lee T. Nesbitt, Jr., professor of dermatology,
Tulane University School of Medicine, New
Orleans

MINI PRESENTATIONS — THE DIAGNOSIS AND
TREATMENT OF THE MOST FREQUENTLY EN-
COUNTERED DERMATOLOGICAL PROBLEMS

SCIENTIFIC PROGRAM— Section on Preventive Medicine

Wednesday, May 9, 1979
Emerald Room
Beginning at 1:30 p.m.

Frank J. Morgan, Jackson
Chairman
Thomas E. Waller, Starkville
Secretary



DR. MORGAN

SHORT COURSES IN:

THE DISABLED PHYSICIANS' PROGRAM — AN OVERVIEW

G. Douglas Talbott, program director of Caduceus Hall, the alcohol and drug facility at Ridgeview Institute, Smyrna, Georgia; and clinical associate professor, Department of Psychiatry, Emory School of Medicine, Atlanta, GA

PERSONAL REVELATIONS BY DISABLED PHYSICIANS

STATUS REPORT ON PROGRESS OF DISABLED PHYSICIAN PROGRAM IN MISSISSIPPI

Ellis M. Moffitt, Jackson

SCIENTIFIC PROGRAM— Section on Urology

Wednesday, May 9, 1979

Dunes

Beginning at 3:00 p.m.

Toxey M. Morris, Hattiesburg
Chairman

Ronald L. Brown, Gulfport
Secretary



DR. MORRIS

SHORT COURSES IN:

UROLOGIC CANCER — CURRENT CONTROVERSY AND CURES

Jean B. deKernion, associate professor of urology, Tulane University School of Medicine, New Orleans

PANEL DISCUSSION: VARIOUS ASPECTS OF UROLOGICAL ONCOLOGY

Edwin M. Davidson, John W. Godsey and Victor T. Bazzone, all of Gulfport and Jean B. deKernion, New Orleans

VISIT THE EXHIBITS

Grand Casino

Complimentary beer and
sandwich bar

11:30 a.m.-2:30 p.m. daily

OUT OF STATE ESSAYISTS



F. JOE DANNEMILLER
San Antonio, TX



FAYE G. SPRUILL
St. Louis, MO



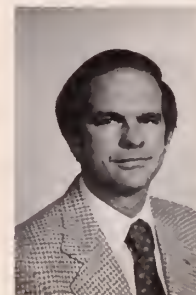
MORTON SPINNER
Brooklyn, NY



FRED B. CHARATAN
Syosset, NY



CHARLES T. RICHARDSON
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Tyler, TX



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Chicago



F. CARTER NANCE
New Orleans



MICHAEL A. CALLAHAN
Birmingham



JOHN C. MORRISON
Memphis



GILBERT S. GORDON
San Francisco

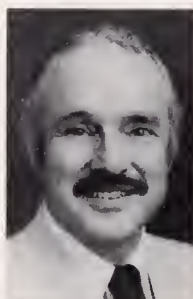
ESSAYISTS / Continued



CHARLES V. SANDERS
New Orleans



LEE T. NESBITT
New Orleans



G. DOUGLAS TALBOTT
Smyrna, GA



JEAN B. DEKERNION
New Orleans

MSMA Tennis Tournament

Wednesday, May 3
1:00 p.m.

Register Now!

SUNDAY, MAY 6, 1979

MISSISSIPPI SOCIETY OF ANESTHESIOLOGY

The Mississippi Society of Anesthesiology will host a breakfast meeting on Sunday, May 6, at 8:00 a.m., in the Sands room. Dexter C. Nettles of Jackson is president, and David I. Carlson of Jackson is secretary-treasurer.

MISSISSIPPI NEUROSURGICAL SOCIETY

The Mississippi Neurosurgical Society will host a breakfast meeting on Sunday, May 6, at 8:00 a.m., in the Pacific room. Glen C. Warren of Jackson is president, Lucien R. Hodges of Jackson is secretary-treasurer, and Robert R. Smith of Jackson is vice president.

MISSISSIPPI ORTHOPEDIC SOCIETY

The Mississippi Orthopedic Society will host a luncheon meeting on Sunday, May 6, at 12:00 noon, in the Sands room. Society officers are Royce H. Franks of Tupelo, president; J. Stewart Williford, Hattiesburg, president-elect; George W. Wharton, Jackson, secretary-treasurer; and Ben H. Buchanan, Tupelo, vice president.

MISSISSIPPI PSYCHIATRIC ASSOCIATION

The Mississippi Psychiatric Association will hold a luncheon business meeting on Sunday, May 6, at 12:00 noon, in the Atlantic room. President is G. Howard Freeman, Meridian; president-elect is Glen Anderson, Jackson; and Richard Rhoden, Jackson, is secretary.

MISSISSIPPI ASSOCIATION OF PATHOLOGISTS

The Mississippi Association of Pathologists will meet for a luncheon in the Pacific room on Sunday, May 6, at 12:30 p.m. following their scientific meeting. Officers of the Association are Allen M. Read, Natchez, president; William B. Wilson, Jackson, president-elect; and Hines Bostwick, Jackson, secretary.

MSMA AND CLINIC MANAGERS ASSOCIATION SEMINAR

Sunday, May 6, 1979

1:00 p.m., Crystal Room

First Session — Personnel Management

Part One — The Hiring Interview

“How to Find Out What you Cannot Ask”

Part Two — The Critical Interview

“How to Tell Employees What They Don’t
Want to Hear”

Second Session — Office Management

Part One — The Non-System

Part Two — The Manual System

Part Three — The Computer System

A question and answer session will follow the program.

MISSISSIPPI MEDICAL FRATERNAL AND EDUCATION SOCIETY

The Mississippi Medical Fraternal and Educational Society will hold its second annual membership meeting on Sunday, May 6, 1979, beginning at 3:00 p.m., in the Emerald room. C. G. Sutherland, chairman of the claims committee and Mr. C. R. Montgomery, legal council to the society, will speak. All physicians are invited to attend.

PRESIDENT'S RECEPTION

The annual President's Reception for officers, members of the association and invited guests will be held in the Crystal and Topaz rooms on Sunday, May 6, from 5:30 to 7:00 p.m.

MONDAY, MAY 7, 1979

REFERENCE COMMITTEE BREAKFAST

Members of all reference committees of the House of Delegates will meet at 8:00 a.m. for breakfast and an orientation session on Monday morning, May 7, in the Atlantic room. Hosts are R. Fraser Triplett of Jackson, speaker, and Walter H. Rose of Indianola, vice speaker.

MISSISSIPPI COMMISSION ON HOSPITAL CARE

The Mississippi Commission on Hospital Care will hold its monthly commission meeting on Monday, May 7, at 10:00 a.m. in the Pacific room. Officers are H. J. Blakeney of Amory, chairman, Walter B. Crook, Jr., of Ruleville, vice chairman; George C. Carlson of Batesville, secretary; and Mr. Ernest C. Moss, Jr., executive director.

FLYING PHYSICIANS ASSOCIATION, MISSISSIPPI CHAPTER

The Mississippi Chapter of the Flying Physicians Association, Inc., will host a luncheon at the Biloxi-Hilton, in the Caribbean room, on Monday, May 7, beginning at 12:00 noon. W. E. Riecken, of Jackson, is president and Thomas R. Singley, Pascagoula, is secretary-treasurer. The speaker will be Mr. Obie S. Young. His topic is "National Flight Instructor of the Year."

MISSISSIPPI FOUNDATION FOR MEDICAL CARE

The Mississippi Foundation for Medical Care will hold its annual meeting on Monday, May 7, beginning at 1:00 p.m. in the Crystal & Topaz rooms. Dr. Thomas Rowland, chairman of the Quality Assurance Committee of South Carolina PSRO, will be the speaker. All members are urged to attend.

GASTROINTESTINAL SEMINAR

The Mississippi Gastrointestinal Association will sponsor a seminar entitled "Diseases of the Stomach" on Monday, May 7, from 4:00 to 5:30 p.m. in the Caribbean room. Members of the association will present papers oriented toward clinical management. There will be a \$5.00 registration fee and the meeting is open to all. Walter T. Boone, Jackson, is president and Joel T. Callahan, Meridian, is secretary.

TULANE MEDICAL ALUMNI

Medical graduates of Tulane University will be feted at a reception at 5:30 p.m. on Monday evening, May 7, in the Atlantic room. Ms. Cindy Wright, medical alumni coordinator, is in charge of arrangements.

UNIVERSITY OF TENNESSEE MEDICAL ALUMNI

Medical alumni of the University of Tennessee will enjoy a reception on Monday, May 7, from 6:00 to 7:30 p.m., in the Stardust room. Arrangements are being made by Mr. Randolph C. Balogh, director of alumni affairs.

OLE MISS MEDICAL ALUMNI

University of Mississippi medical alumni, families and guests will meet on Monday, May 7, at the Biloxi Hilton. Alumni registration will be located adjacent to MSMA general registration in the First Level Lobby near the Grand Ballroom, and will be open at 8:00 a.m. and tickets for the evening party will be available. A general business meeting will be held at 4:00 p.m. on Monday, May 7, in the Dunes Room. The cocktail party will be held in the Gulf side lobby, adjacent to the Grand Ballroom, beginning at 7:00 p.m. that evening, and will be followed at 8:00 p.m. by a Seafood Jamboree dinner-dance.

ACTIVITIES / Continued

Leonard Ball, Gulfport, is program planning chairman. Other committee members are John E. Williams and David L. Clippinger, both of Gulfport. L. Stacy Davidson of Cleveland is medical alumni president and J. Elmer Nix, Jackson, is president-elect.

The Medical Alumni Guardian Society will also meet during the MSMA Annual Session. The annual business meeting will be held on Saturday, May 5, at 4:00 p.m. That evening the society will host a cocktail party and dinner for members and their guests. Kelly S. Segars of Iuka is chairman and James C. Griffin of Jackson is vice chairman. Members of the planning committee are Walter T. Boone of Jackson, chairman, and George E. Abraham of Vicksburg and Nancy W. Burrow of Brandon.

TUESDAY, MAY 8, 1979

AMERICAN COLLEGE OF SURGEONS, MISSISSIPPI CHAPTER

The American College of Surgeons, Mississippi Chapter will conduct a scientific meeting on Tuesday, May 8, beginning at 9:00 a.m. in the Crystal Room. The program will consist of a symposium of spectacular cases, a lecture and a panel discussion.

9:00 a.m. — Symposium

Complex Injury to Buttock with Repeated Hemorrhage

William L. Safley, Jackson

Bypass for Obesity — My Fattest Patient

Richard J. Field, Jr., Centreville

Diaphragmatic Hernia in a Newborn with Most Abdominal Viscera in Chest

Richard C. Miller, Jackson

Regional Enteritis: Five Siblings in Same Family

Clyde H. Gunn, Jr., Moss Point

10:15 a.m. — Lecture

Management of Abdominal Wounds at the Battle of New Orleans and at Present

F. Carter Nance, New Orleans

11:00 a.m. — Panel Discussion

Difficult Unknown Cases

Presented by Ralph E. Abraham, Hattiesburg

Panel members: J. Harold Conn, James D. Hardy, J. Harvey Johnston, all of Jackson and F. Carter Nance, New Orleans.

Fellows will adjourn for luncheon in the Dunes room at 12:00 noon. Officers of the college are James D. Hardy, Jackson, president; W. Briggs Hopson, Vicksburg, president-elect; and Benton M. Hilbun, Tupelo, secretary. ACS officers will meet for breakfast on Tuesday at 7:00 a.m. in the Caribbean room.

MISSISSIPPI PERINATAL ASSOCIATION

The Mississippi Perinatal Association will hold its annual meeting on Tuesday, May 8, at 9:00 a.m. in the Pacific room. All interested pediatricians and obstetricians are urged to attend. Officers of the association are William L. Kahlstorf, Tupelo, president; Daniel H. Draughn, Jackson, vice-president; and Frank W. Wilburn, Tupelo, secretary-treasurer.

AMERICAN COLLEGE OF PEDIATRICS, MISSISSIPPI CHAPTER

American College of Pediatrics, Mississippi Chapter, will host a luncheon on Tuesday, May 8, 11:30 a.m. in the Caribbean room. Officers of the chapter are William F. Sistrunk, Jackson, president, and William M. Hilbun, Tupelo, secretary.

MISSISSIPPI SOCIETY OF INTERNAL MEDICINE

The Mississippi Society of Internal Medicine will have a luncheon on Tuesday, May 8, at 12:00 noon in the Atlantic room. James C. Hays of Jackson is president and Bruce E. Atkinson of Amory is secretary-treasurer.

MISSISSIPPI FOUNDATION FOR MEDICAL CARE MEDICAL AUDIT SEMINAR

The Mississippi Foundation for Medical Care will hold a Medical Audit Seminar on Tuesday, May 8, in the Sands room at 1:30 p.m.

ASSOCIATION FELLOWSHIP PARTY

Members of the Mississippi State Medical Association, their families and guests will enjoy a fellowship cocktail party on Tuesday evening, May 8, Sandpiper Terrace, second level, beginning at 6:30 p.m. Tickets are available at the MSMA registration desk.

WEDNESDAY, MAY 9, 1979

ACADEMY OF FACIAL PLASTIC AND RECONSTRUCTIVE SURGERY

The Academy of Facial Plastic and Reconstructive Surgery will host a breakfast on Wednesday, May 9, at 7:30 a.m. in the Caribbean room. Officers of the academy are George L. Arrington, Jr., Meridian, president; Joe Burnett, Oxford, vice president; and J. George Smith, Jackson, secretary.

MSMA PAST PRESIDENTS' BREAKFAST

Past Presidents of the Mississippi State Medical Association will enjoy a fraternal breakfast on Wednesday morning, May 9, at 7:30 a.m. in the Atlantic room. James O. Gilmore of Oxford is host.

MISSISSIPPI DERMATOLOGICAL SOCIETY

The Mississippi Dermatological Society will host a luncheon and a cocktail party on Wednesday, May 9. The luncheon will be held at 11:30 a.m. in the Caribbean room prior to their scientific section meeting that afternoon. The cocktail party will also be held in the Caribbean room at 5:00 p.m. Officers of the society are James N. McQueen, Jackson, president; John A. Marascalco, Greenville, president-elect; and Thomas C. Garrott, Biloxi, secretary.

MISSISSIPPI EENT ASSOCIATION

The Mississippi EENT Association will hold a luncheon and business session on Wednesday, May 9, at 12:00 noon in the Sands room. Association officers are George L. Arrington, Jr., Meridian; Fred L. McMillan, Jackson, vice-president; and Wilson E. Moak, Jackson, secretary-treasurer.

MISSISSIPPI OB-GYN SOCIETY

The Mississippi Ob-Gyn Society will conduct a luncheon meeting on Wednesday, May 9, in the Cafe Royale at 12:00 noon. Officers of the society are H. Lamar Gillespie, Hattiesburg, president; Lewis D. Lipscomb, Jackson, president-elect; Thomas R. Singley, Pascagoula, vice president; and Fred H. Ingram, Jackson, secretary.

FIFTY YEAR CLUB

The Board of Trustees, sponsors of the association's Fifty Year Club, will honor the half-century-plus members at a special luncheon on Wednesday, May 9, at 12:00 noon. Robert S. Caldwell of Tupelo, chairman of the Board of Trustees, will preside.

MISSISSIPPI ACADEMY OF FAMILY PHYSICIANS

The Mississippi Academy of Family Physicians will sponsor a luncheon meeting at 12:00 noon on Wednesday, May 9, in the Crystal room. Guest speaker will be Charles V. Sanders, Jr., Louisiana State University School of Medicine, New Orleans. Officers of the Mississippi academy are John M. Estess, Hollandale, president; Edgar Johnson, Hattiesburg, president-elect; J. Edward Hill, Hollandale, vice president; and Ben E. Kitchens, Iuka, secretary-treasurer.

MISSISSIPPI UROLOGICAL SOCIETY

The Mississippi Urological Society will hold a luncheon meeting in the Pacific room, Wednesday, May 9, at 12:00 noon. They will also host a cocktail party at 5:15 p.m. in the Atlantic room and a dinner in the Sands room at 7:00 p.m. Officers of the society are Toxey M. Morris, Hattiesburg, president; Lucas O. Platt, Tupelo, vice president; and Ronald L. Brown, Gulfport, secretary-treasurer.

MSMA TENNIS TOURNAMENT

MSMA will sponsor a tennis tournament with men's and women's doubles on Wednesday afternoon, May 9, beginning at 1:00 p.m. Leonard Ball of Gulfport is chairman.

ACTIVITIES / Continued

GENITOURINARY SEMINAR

The Mississippi Urological Society will sponsor a Genitourinary Seminar to be conducted on Wednesday, May 9, from 1:00 to 3:00 p.m. in the Dunes room.

Program: *Urology for the Family Practitioner*

1:00 p.m. *General Treatment of Neurogenic Dysfunction*, Gerald Wessler, Gulfport, MS

1:30 p.m. *Carcinoma of the Genitourinary Tract - An Update in Diagnosis and Treatment*, Robert J. Irwin, Jr., Jackson, MS

2:00 p.m. *Profile of the Urinary Tract Stone Patient*, John P. Elliott, Tupelo, MS

3:00 p.m. *Recent Advances in Urology*, Jean B. deKernion, New Orleans

There will be a cocktail party after the Seminar and all registrants are invited to attend. **REGISTRATION FEE is \$5.00.** Send to Dr. Ronald Brown, 1118 Broad Avenue, Gulfport, MS 39501.

SHORT COURSE IN TONOMETRY

The Mississippi Society for Prevention of Blindness will sponsor a short course in Tonometry for family physicians on Wednesday, May 9 at 3:30 p.m. in the Pacific room.

MISSISSIPPI STATE MEDICAL ASSOCIATION AUXILIARY

56th Annual Session
May 6-10, 1979
Biloxi Hilton



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MRS. BARNETT

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AUXILIARY

Sunday, May 6, 1979

2:00-6:00 p.m. Registration and Welcome Booth,
Hilton Lobby

3:00 p.m. Finance Committee Meeting,
Caribbean Room

Monday, May 7, 1979

9:00 a.m.-5:00 p.m. Registration, Hilton Lobby
8:00 a.m. Orientation Continental Breakfast for officers, Sands Room
2:30 p.m. Preconvention Board meeting, Stardust Room
3:30 p.m. Coffee and AMA-ERF Benefit, Sands Room
Plant Care Demonstration by Mrs. Barbara Patterson, Green Thumb Nursery
All members invited.

Tuesday, May 8, 1979

9:00 a.m.-12:00 noon — Registration, Hilton Lobby
9:00 a.m. Coffee, Coronet Room, Broadwater Beach Hotel
9:15 a.m. General Session, Coronet Room
Invocation
Welcome
Introductions
Greetings
Mrs. Hoyt Gardner, 1st Vice President, AMA Auxiliary
Carl G. Evers, M.D., MSMA President
Gerald P. Gable, M.D., MSMA President-Elect
Memorial
Roll Call
Minutes
Appointment of Delegates to AMA Auxiliary Annual Meeting
Business
Election of Officers
Installation of Officers
Courtesy Resolutions
Adjournment
1:00 p.m. Luncheon, Crown Room, Broadwater Beach Hotel
Invocation
Introductions
Guest Speakers
Mrs. Hoyt Gardner, 1st Vice President, AMA Auxiliary
Mrs. Margaret Clements, Georgia Medical Auxiliary, *The Disabled Physician*
Awards
Presentation of Officers
Entertainment
4:00 p.m. Postconvention Board Meeting, Caribbean Room

Wednesday, May 9, 1979

9:00 a.m. Past Presidents' Breakfast, Pacific Room
10:30 a.m. Coffee and Gumbo Demonstration, Dunes Room
Mrs. Bertha Fontaine, National Marine Fisheries Service

AUXILIARY ANNUAL SESSION
COMMITTEE CHAIRMEN

★ ★ ★

Convention Chairman
Mrs. I. C. Knox, Jr., Vicksburg

★ ★ ★

Registration
Mrs. James B. Martin, Ocean Springs

★ ★ ★

Sunday Welcome Booth
Mrs. Curtis Roberts, Brandon

★ ★ ★

Luncheon Chairmen
Mrs. Jerry T. Russell Vicksburg Mrs. George E. Abraham, III Vicksburg

★ ★ ★

Monday Afternoon Coffee
Mrs. Milam S. Cotten, Hattiesburg

★ ★ ★

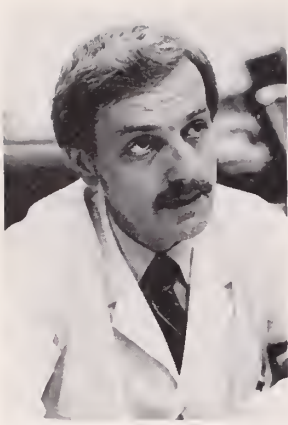
Hospitality
Mrs. Ben H. Buchanan, Tupelo

★ ★ ★

Hostesses
Mrs. J. Edward Hill Hollandale Mrs. William Bowlus Jackson

★ ★ ★

Tour Chairman Publicity
Mrs. Gerald Wessler Mrs. John Estess
Gulfport Hollandale



The President Speaking

Teaming With Business in a Common Cause

CARL G. EVERS, M.D.
Jackson, Mississippi

Last November an important American said in a speech deploring federal over-regulation and "Big Brother government": "Will our people . . . be tempted by 'quick cures' to major problems, through government action on symptoms . . . ?"

The speaker continued, "A majority of Americans believe the cost of regulation outweighs its benefits. A majority also believe government has become too paternal in trying to protect people from their own actions or inactions. . . . Our challenge then is to recognize this new public mood as an opportunity to rebuild American faith in the free market principles that are the source of the strength and durability of the American way of life."

Who made these remarks to the Rotary Club of Chicago? A medical spokesman? One well could have, in view of such actions as the Federal Trade Commission attacks on physician-advertising principles and medical school accreditation procedures, and in view of the clouded legislation that becomes stormy regulation — as in the case of the Health Planning Act of 1974.

No, the speaker was William B. Johnson, chairman and chief executive officer of a large conglomerate, IC Industries, Inc. What he said reflects the identity of interest — including public interest — between medicine and business.

A startling example of government self-interest versus medicine, industry (specifically, the pharmaceutical), and the public was HEW's January firing of Norman Latker as its chief patent counsel after 22 years of federal service.

Latker had testified to Congress that HEW was delaying the release of potentially life-saving drugs. The *Chicago Tribune* quoted him, "The worst thing I could have done as HEW might see it was to tell the truth. . . ."

The AMA also has deplored the delays in the approval and distribution of potentially beneficial drugs.

Drug regulation is one of the key issues faced by the new Congress. Another that affects medicine, industry, and the public is health care cost containment — with the threat of federal controls that could ultimately result in rationing of care.

Cost containment is an area in which medicine and industry have been cooperating and must further cooperate. Industry was represented on the AMA-sponsored National Commission on the Cost of Medical Care, which (in the spirit of Mr. Johnson's "free market principles") stressed marketplace choice in health coverage. Industry also has an important role in the Voluntary Effort to curb the cost rise. And, AMA representatives have been talking to corporate boards of trustees on the cost problem and the profession's approaches.

We should tell business (and the public) what our profession is doing about costs and other concerns — and invite joint voluntary action as opposed to federal hyperactivity.

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Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthal reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

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EDITORIALS

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

VOLUME XX, Number 4

APRIL 1979

JMSMA Is Twenty Years Old

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is now twenty years old. Publication of the first issue in 1960, replacing *The Mississippi Doctor* as our official publication, represented a progressive step by our society. During this interval, your journal has been managed and published by the Publications Committee of the Mississippi State Medical Association. The primary objectives of this staff are to publish a high quality, timely and informative scientific journal of interest to the majority of our members. This challenge requires individual and cooperative efforts between members of the staff and between the publication staff and the general membership. Your editors not only appreciate comments and inquiries from the members but actively seek such membership participation. Any member having suggestions or inquiry regarding the editorials, scientific publications, advertising, special articles or general administrative policies relating to this publication are invited to address their comments to the Publications Committee which will meet during the upcoming annual session.

MYRON W. LOCKEY, M.D.
Associate Editor

Medico-Legal Brief

Physician Sentenced For Controlled Drug Violations

A trial court did not abuse its discretion in sentencing a 68-year-old physician to five years' im-

prisonment after conviction on 25 counts of dispensing and distributing controlled drugs in violation of federal controlled drug laws, a federal appellate court in Louisiana ruled.

In 1971, the physician began practice specializing in obesity when he gave up a general surgery and obstetrics practice because of his age. On separate occasions in 1976 and 1977, the physician was visited by six DEA agents who posed as overweight patients. The physician prescribed or dispensed large quantities of Ionamin, Placidyl, phendimetrazine and Biphedamine, all Schedule II controlled substances.

He performed no physical examination other than taking blood pressure and weight, he told the agents where to have their prescriptions filled, and he used street slang on some occasions for the drugs prescribed. In the case of two of the agents the physician gave them controlled drugs in return for what he thought was the debugging of his office by the agents, who were referred to him as electronic experts.

Affirming the trial court's sentence of five years' imprisonment for conviction on 25 counts of violating federal controlled drug laws, the appellate court said that the evidence supported the verdict. The physician knowingly prescribed or dispensed the controlled drugs without a legitimate medical purpose, the court said.

The trial court had wide discretion in determining the sentence, and imposition of 5 years' imprisonment was not an abuse of discretion, the appellate court concluded. — *U. S. v. Rosen*, 582 F.2d 1032 (C.A.5, La., Oct. 30, 1978)

LETTERS

SIRS: It is with growing concern that I read about plans for a National Health Insurance program. As a physician recently arrived from Canada, and having been part of such a plan, I am disappointed in this obvious political ploy on the part of Sen. Edward Kennedy.

The major reason for my uprooting my family and moving 1,900 miles was socialized medicine. Government intervention at every level of medical practice has caused Canada to lose some 500 physicians to the United States with an estimated 700 to 1,000 in the next year. How can such discontent go unnoticed?

The gross abuse of "free medical care" is non-existent in my private practice in Texas. If cost containment is the issue, then NHI is not the way to obtain this. It would only be a short while before local and federal governments would be unable to meet the incredibly spiraling costs of an NHI plan and the vast bureaucracy of paper-pushing it creates.

A lesson should be taken from the British National Health Service that is presently on the verge of collapse. For some patients it has already collapsed. If you are on a three-year waiting list for an orthopedic operation, that's collapse.

There are almost five bureaucrats administering each British hospital bed today, each drawing a government salary. The NHS' head bureaucrat has nearly 8,800 paper pushers on his personal staff alone. The NHS now numbers 750,000 workers making it the largest single employer in Britain. Is this what Sen. Kennedy means by cost containment?

BARTON J. ROMANECK, M.D.
901 Bois D'Arc
Lockhart, TX 78644

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PERSONALS

JAMES L. ACHORD of Jackson and UMC attended recent meetings of the executive committee and board of trustees of the American College of Gastroenterology in Hilton Head, SC.

GUS DAVIS BERRYHILL has associated with JOE A. CAMPBELL, JR., in Clarksdale, for the practice of internal medicine.

MICHAEL C. DE BERARDINIS announces the relocation of his urology practice to Huntsville, TX. Patient information can be obtained from Doctors Park Clinic, Houston, MS.

THOMAS BLAKE of Jackson and UMC was in New Orleans for the recent Mississippi-Louisiana meeting of the American College of Physicians.

GUY CAMPBELL of Jackson and UMC attended a board of directors meeting of the American Lung Association in Colorado Springs.

CLAY E. EASTERLY was recently installed as chief of staff at Gulf Coast Community Hospital.

MSMA President CARL EVERS of Jackson attended the AMA Leadership Conference held in Chicago.

MEL FLOWERS, JR. of Jackson and UMC presented the treasurer's report at the Southeastern Chapter Council, Society of Nuclear Medicine meeting in Orlando, FL.

JOHN FORESTNER, UMC assistant professor of anesthesiology, attended the recent 17th Clinical Conference in Pediatric Anesthesia in Los Angeles.

W. R. GILLIS of UMC recently spoke to the Vicksburg Lions Club on "Family Practice Training in Mississippi."

CLYDE O. HAGOOD, JR., Biloxi, was moderator for the recent continuing medical education symposium sponsored by Gulf Coast Community Hospital.

JAMES D. HARDY of Jackson and UMC attended the scholarship committee meeting of the American College of Surgeons.

JACK C. HOOVER of Pascagoula has been named chief of staff at Singing River Hospital.

H. FRANK HOWELL of Jackson announces the relocation of his offices for the practice of family medicine to Hinds Professional Building.

MICHAEL E. JABALEY, FREDERICK HECKLER and WILLIAM WALLACE, all of UMC, presented papers at a February meeting of the American Society for Surgery of the Hand held in San Francisco. The meeting was also attended by LUTHER FISHER, III, also of UMC.

JOE NORMAN of Jackson and UMC attended the Hypoxia Symposium of the Arctic Institute of North America held recently in Canada.

ROLAND B. ROBERTSON of Jackson represented UMC at the Southeastern Seminar on Geriatrics in Biloxi.

E. E. ROBINSON, III of Laurel announces his association with BERNARD S. PATRICK, and the relocation of his office for the practice of neurological surgery to 971 Lakeland Drive in Jackson.

ROBERT A. SANFORD of Jackson and UMC presented a paper at the Society of University Neurosurgeons meeting in Guadalajara, Mexico recently.

WINFRED WISER of UMC attended the recent scientific sessions of the American Fertility Society in San Francisco.

DEATHS

BEACHAM, AUBREY V., Magnolia. Born McComb, MS, Nov. 18, 1906; M.D., Tulane University School of Medicine, New Orleans, LA, 1934; interned Charity Hospital, New Orleans, 1934-36; Emeritus member of MSMA and AMA; died Feb. 7, 1979, age 72.

NEW MEMBERS

ABRAHAM, GEORGE E., II, Picayune. Born Vicksburg, MS, Sept. 8, 1942; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned UMC, 1975-76; family practice residency, same, 1976-78; elected by West Mississippi Medical Society.

BARONA-QUESADA, JAIRO, Jackson. Born Cali, Colombia, Nov. 4, 1939; M.D., Facultad de Medicina de la Universidad del Valle, Cali, Valle, Colombia, 1964; interned University Hospital, Cali, Colombia, one year; medicine residency, same, one year; medicine residency, Ochsner Foundation Hospital, New Orleans, 1967-69; nephrology residency, same, 1971-73; elected by Central Medical Society.

CARLSON, BRIAN RICHARD, Vicksburg. Born Fremont, NE, May 21, 1949; M.D., Vanderbilt University School of Medicine, Nashville, TN, 1974; interned Parkland Memorial Hospital, Dallas, TX, one year; pathology residency, same, 1975-78; elected by West Mississippi Medical Society.

GASSAWAY, JOHN GREGORY, Starkville. Born Saltillo, MS, Jan. 28, 1941; M.D., University of Mississippi School of Medicine, Jackson, 1966; interned USPHS, New Orleans, LA, one year; orthopedic surgery residency, USPHS, Staten Island, NY, 1971-74; elected by Prairie Medical Society.

HAMBLIN, ORBY LYNN, Calhoun City. Born Houston, MS, Sept. 30, 1947; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned Baptist Hospital, Memphis, TN, one year; elected by Northeast Mississippi Medical Society.

LAWHON, NANCY CAROLYN, Jackson. Born Laurel, MS, Oct. 30, 1946; M.D., University of Mississippi School of Medicine, Jackson, 1971; interned UMC, Jackson, one year; internal medicine residency, same, 1972-73; radiology residency, same, 1975-78; elected by Central Medical Society.

LEE, MERCER, III, Jackson. Born Jackson, MS, April 3, 1948; M.D., University of Mississippi School of Medicine, Jackson, MS, 1974; interned and ob-gyn residency, UMC, Jackson, 1974-78; elected by Central Medical Society.

POTNIS, KRISHNARAO S. Vicksburg. Born India, April 16, 1939; M.D., University of Bombay, Affiliated Medical Colleges, Bombay, India, 1962; interned, India, two years; interned Bridgeport Hospital, Bridgeport, CT, 1964; ob-gyn residency, State University of New York, 1965-69; elected by West Mississippi Medical Society.

SCHAFER, WILLIAM ALLEN, University. Born Spokane, WA, Oct. 30, 1951; M.D., University of Washington School of Medicine, Seattle, 1975; interned Tulane University Hospital, New Orleans, LA, and Baptist Memorial Hospital, Memphis, TN, one year; internal medicine residency, Baptist Memorial Hospital, Memphis, 1976-78; elected by North Mississippi Medical Society.

TURNBULL, EDWARD R., Laurel. Born Nashville, TN, April 27, 1944; M.D., University of Tennessee College of Medicine, Nashville, 1970; interned Portsmouth Naval Hospital, Portsmouth, VA, one year; general surgery residency, University of Tennessee Hospital and Campbell Clinic, Nashville, 1974-78; elected by South Mississippi Medical Society.

POSTGRADUATE CALENDAR

April 16-20, 1979

PULMONARY MEDICINE INTENSIVE
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine, the University Medical Center Division of Continuing Health Professional Education and the Mississippi Lung Association. Coordinators: A. Wallace Conerly,

POSTGRADUATE / Continued

M.D., assistant professor of medicine, University of Mississippi School of Medicine; director, Respiratory Therapy, University Hospital; and medical director and acting chairman, Department of Respiratory Therapy, University of Mississippi School of Health Related Professions, and Joe R. Norman, M.D., professor of medicine, Christmas Seal Professor of Pulmonary Disease, and associate professor of physiology and biophysics, University of Mississippi School of Medicine, and director, Division of Pulmonary Diseases, University Hospital.

This week-long intensive course for physicians will include the April 19 Mississippi Thoracic Society annual meeting and Henry Boswell Lecture presented by the Mississippi Lung Association. The course will emphasize pulmonary function studies, arterial blood measurements and ventilatory management. Fee: \$150.00; \$20.00 for the April 19 session only. Credit: 40 contact hours, .4 CEU; 7 contact hours, .7 CEU for the April 19 session, Category I of the Physician's Recognition Award, AMA; AAFP credit applied for.

FUTURE CALENDAR

April 20-21, 1979

ADVANCED CARDIAC LIFE SUPPORT
PROVIDERS COURSE
Singing River Hospital, Pascagoula

All continuing correspondence should be addressed to: Continuing Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

UMC Announces New Faculty Members

A professor and two assistant professors have joined the centerwide facilities at the University of Mississippi Medical Center. Dr. Norman C. Nelson, UMC vice chancellor and medical school dean, announced their appointment following approval by the Board of Trustees, State Institutions of Higher Learning.

Dr. Warren W. Johnson, a native of Ackerman, joined the faculty as a professor of pathology. Dr. Philip W. Tucker and Dr. Chia Chu Pao were named assistant professors of biochemistry.

Dr. Johnson, who earned the M.D. degree at the UMC School of Medicine in 1957, is an alumnus of

Millsaps College. He earned the M.S. degree in anatomy at the University of Mississippi.

Dr. Johnson took residency training at the University of Tennessee in Memphis. He has been a pathologist at St. Jude Children's Research Hospital and an associate professor of pathology at the University of Tennessee since 1968.

Dr. Tucker, a postdoctoral fellow at the University of Wisconsin since 1976, earned the B.S. and M.S. degrees at the University of Texas at Austin. He earned the Ph.D. degree at Texas A & M in 1975. He was a postdoctoral fellow at Roche Institute of Molecular Biology in New Jersey from 1975-1976.

A postdoctoral fellow at the University of Washington since 1976, Dr. Pao earned the B.S. and M.S. degrees at the National Taiwan University. He is a Ph.D. graduate of the University of Connecticut.

Ole Miss Medical Alumni Plan Reunion

Plans have been completed for the 27th annual reunion of the University of Mississippi Medical Alumni, to be held May 7, 1979, at the Biloxi Hilton. The meet is scheduled in conjunction with the 111th Annual Session of MSMA.

Dr. Leonard D. Ball, III, chairman of the program planning committee, announces that registration will begin at 8:00 a.m. and continue until 7:00 p.m.

A business meeting is set for 4:00 p.m. in the Dunes Room, with Dr. L. Stacy Davidson of Cleveland, president of the alumni group, presiding. Agenda items include reports on alumni activities and university programs and reports from student leaders.

A cocktail party in the Gulf side lobby at 7:00 p.m. will precede the seafood buffet and dance, set for the Grand Ballroom. During a brief program, Dr. J. Elmer Nix of Jackson, 1978-79 president-elect, will assume the office of president. Awards will be presented to the preclinical professor of the year, the clinical professor of the year, and senior student of the year. Door prizes of gift certificates and football tickets will be awarded. Music for the dance will be provided by the Jack Jones Orchestra of Jackson.

Sponsoring firms and their representatives are: Bristol Laboratories, Bill Corley; Healthco-Mississippi Surgical Supply Co., David McNamara; Cooper Laboratories, Fred Mann; and Thomas Yates and Co., Thomas Yates.

For more information, write: Office of Alumni Activities, 2500 North State Street, Jackson, MS 39216, or telephone 982-9561.

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Each gram contains: Aerosporin[®] (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyoderma (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the

ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

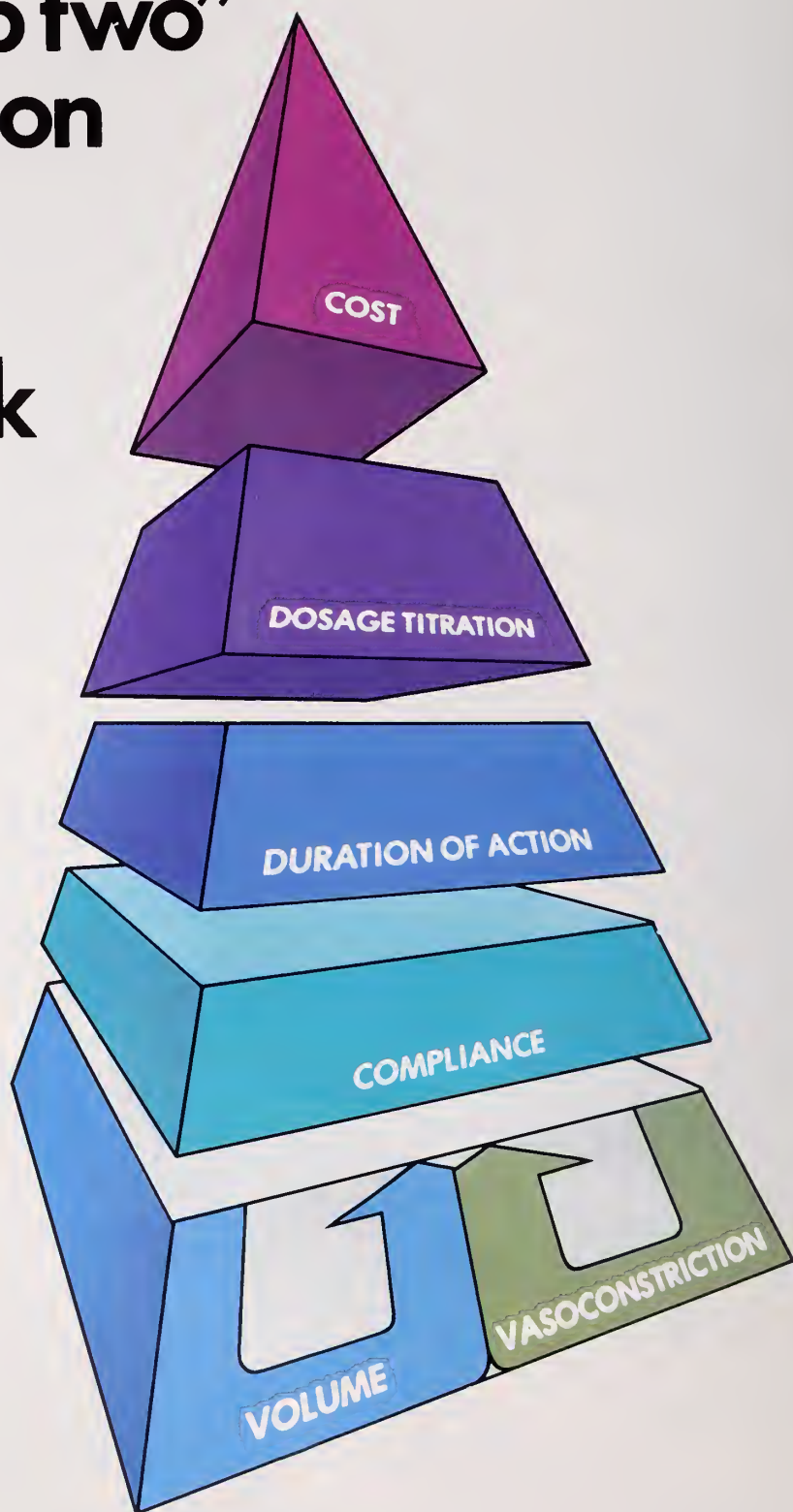
secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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hypertension
therapy
requires
every block**



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(hydroflumethiazide 50 mg.)

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Salutensin-Demi[™]
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Salutensin contains the recommended effective doses of both its components, requiring minimal titration.

Duration of action

Salutensin contains Saluron (hydroflumethiazide), an intermediate-acting thiazide diuretic, which works over an 18-24 hour period, ideal for once-daily therapy.

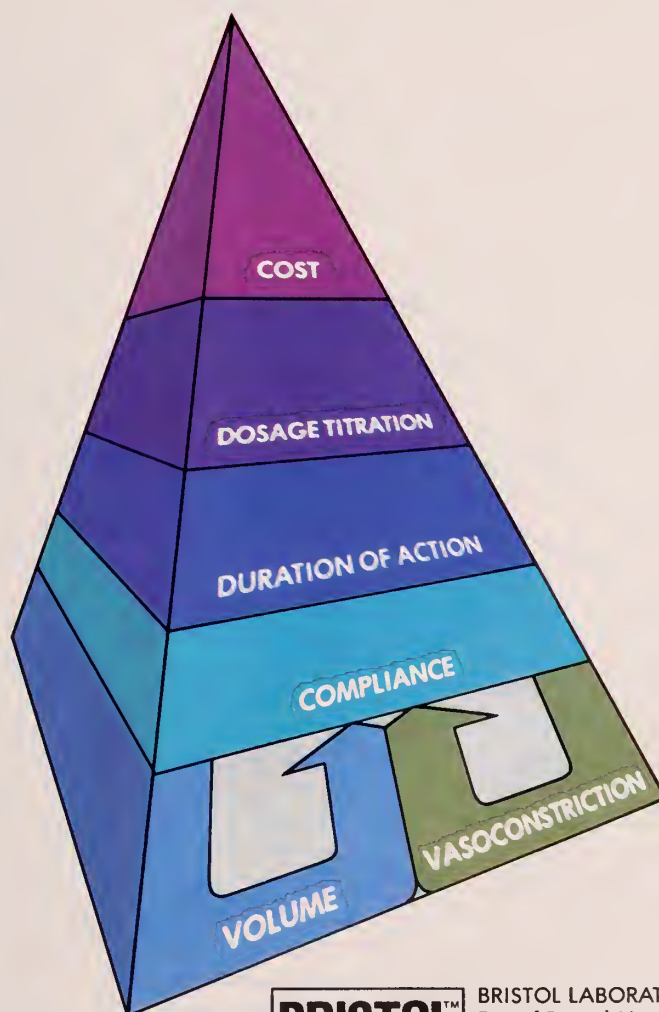
Compliance

The total daily dose can be given once a day. Compared with multiple-daily-dosage medications, the chance of a missed dose is greatly reduced.

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At the foundation of "step two" hypertension therapy, control of both circulating volume and peripheral resistance can be effectively achieved with the combination tablet Salutensin one day at a time.

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antihypertensives
completing the
therapeutic pyramid



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References: 1. Finnerty, F.A. et al.: An Evaluation of Step 2 Regimens in Hypertension, data on file, Bristol Laboratories, 1977. 2. Red Book 1977.

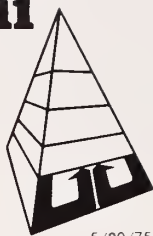
For a summary of prescribing information, please see following page.

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(hydroflumethiazide 50 mg./reserpine 0.125 mg.)

Salutensin-Demi™
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structured for the
long run in "step two"
hypertension



Saluron® (hydroflumethiazide)

For complete information consult Official Package Circular.

CONTRAINDICATIONS: Patients with anuria, oliguria, or hypersensitivity to this or other sulfonamide derived drugs.

WARNINGS: Saluron should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Thiazides may be additive or potentiative of the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in pregnancy: Usage of thiazides in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing mothers: Thiazides cross the placental barrier and appear in cord blood and breast milk.

PRECAUTIONS: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except, under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased or unchanged. Latent diabetes mellitus may become manifested during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS:

A. Gastrointestinal system reactions: Anorexia, gastric irritation, nausea,

vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis.

B. Central nervous system reactions: Dizziness, vertigo, paresthesias, headache, xanthopsia.

C. Hematologic reactions: Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

D. Dermatologic-Hypersensitivity reactions: Purpura, photosensitivity, rash, urticaria, necrotizing angitis (vasculitis) (cutaneous vasculitis).

E. Cardiovascular reaction: Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates, or narcotics.

F. Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

USUAL DOSE: The average adult diuretic dose is 25 to 200 mg. per day. The average adult antihypertensive dose is 50 to 100 mg. per day.

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

HOW SUPPLIED: Saluron (hydroflumethiazide 50 mg.): Bottles of 100.

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(12) 10/27/78

(hydroflumethiazide, reserpine antihypertensive formulation)

For complete information consult Official Package Circular.

WARNING

This fixed combination drug is not indicated for initial therapy of hypertension. Hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension is not static, but must be reevaluated as conditions in each patient warrant.

CONTRAINDICATIONS: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

WARNINGS: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients.

Use in pregnancy: Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

PRECAUTIONS: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss may cause digitalis intoxication. Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or bronchial asthma and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being pre-diabetic should be kept under close observation if treated with this agent.

ADVERSE REACTIONS: Hydroflumethiazide: Skin-rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. **Reserpine:** Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares.

USUAL DOSE: 1 tablet b.i.d.

HOW SUPPLIED: Salutensin (hydroflumethiazide 50 mg., reserpine 0.125 mg.): Bottles of 100 and 1000.

Salutensin-Demi (hydroflumethiazide 25 mg., reserpine 0.125 mg.): Bottles of 100.

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MC2221

MEDICAL ORGANIZATION

MSMA Board of Trustees Meets in Jackson

MSMA's Board of Trustees held its regular winter meeting in Jackson on March 15 for the purpose of reviewing the association's annual audit and considering Board reports to the House of Delegates at the 111th Annual Session of the association.

The 1978 annual audit indicated an improved financial position over 1977 with annual reserves reaching budgeted amounts. The Board commended the Council on Budget and Finance for the association's continued improving financial position.

The Board received reports concerning organization of the 111th Annual Session and JOURNAL MSMA operations during 1978. The former revealed plans for a sell-out annual meeting featuring 14 scientific sections and meetings of the MSMA House of Delegates, Mississippi Foundation for Medical Care and Mississippi Medical Fraternal and Educational Society plus numerous other specialty and medical alumni groups. JOURNAL MSMA completed its 20th consecutive year of publication and received honorary mention in the Sandoz National Medical Journals Award Contest in 1978.

The Board reviewed its reports to the House of Delegates including reports on organization of the MSMA Disabled Physicians' program, annual MSMA operations, legislation, and the status of court proceedings involving the association.

The Board will also submit other reports to the House of Delegates covering a study of Mississippi's health needs, a recommendation for a change in MSMA's bylaws to provide membership to osteopaths and a recommendation that the State Board of Health require at least one year of postgraduate medical training as a prerequisite for licensure.

MSSMT Schedules Annual Meeting

The Mississippi State Society for Medical Technology will hold its Annual Meeting April 25-28, 1979, at the Coliseum Ramada Inn in Jackson.

On Thursday, April 26, the exhibits will be held open from 1:00 p.m. to 2:30 p.m. for viewing by physicians and hospital personnel involved in pur-

chasing. The event is open to all interested medical personnel, according to Cheryl Drennan, annual meeting chairman.

Guardian Society Sets Meeting

The Medical Alumni Guardian Society of the University of Mississippi will conduct its fourth annual meeting Saturday, May 5, 1979, at the Biloxi Hilton.

Registration for Guardian Society Day will begin at 3:30 p.m. A business meeting, set for 4:00 p.m., will feature reports on the various programs the society sponsors, recognition of new members, and election of officers. Dr. Kelly S. Segars of Iuka is 1978-79 chairman, and Dr. James C. Griffin, Jr. of Jackson is vice chairman.

A dinner is scheduled for Saturday evening. A special program has been planned by Dr. Walter T. Boone, planning committee chairman, and his committee members, Dr. George E. Abraham and Dr. Nancy W. Burrow. Administrative leaders from both University of Mississippi campuses, Oxford and Jackson, will attend the meetings.

The Guardian Society, officially established in 1975, is composed of over 230 medical alumni and friends of the University of Mississippi School of Medicine. The organization is devoted to exceptional financial support to medical education in the state. Through either undesignated or restricted gifts of a deferred nature (bequest, trust, life insurance) or by a current method (cash, transfer of property, etc.), the Guardian Society has achieved a giving value of \$2,700,000.

Purpose of Guardian Society Day is to recognize members, express appreciation for their gifts, and report on the growth of the organization.

Representatives of companies sponsoring the events are: Robert J. Lindekens of Gafmed Medical X-Ray Products, David McNamara of Healthco, and Delton Lyon of Mead-Johnson.

More information about the Guardian Society and plans for the Coast meeting can be obtained by writing: Office of Alumni Activities, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216. Telephone number is 982-9561.

ORGANIZATION / Continued

Medical Assistants Hold Symposium

Medical assistants from throughout Mississippi recently gathered at the Holiday Inn, Meridian, for their Eighth Annual Educational Symposium sponsored by the American Association of Medical Assistants — Mississippi Chapter (AAMA-MS).

State President, Ethel Tatum of Meridian, opened the symposium. Speakers, all from Meridian, were: Dr. Joel T. Callahan, internal medicine, gastroenterology; Dr. Dan Thornton, obstetrics and gynecology; Dr. Thomas H. Greer, Jr., internal medicine, cardiology; Dr. L. D. Fleckenstein, neurosurgery and Dr. William B. Simmons, pediatrics. Special guest speaker was Rep. G. V. "Sonny" Montgomery from Washington, DC.

There are 19 chapters of medical assistants in Mississippi with a membership of 450. A 20th chapter is presently being organized in Picayune.

Another educational workshop will be held this month in conjunction with the annual convention of AAMA-MS which will take place in Meridian.

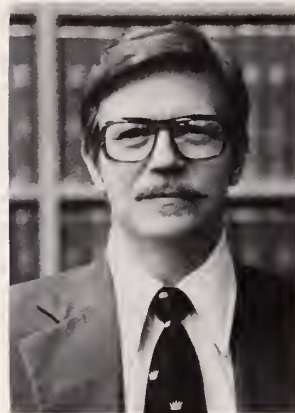
Tri-State Thoracic Conference Convenes



Mississippi physicians participating in the 23rd annual Tri-State Thoracic Conference held recently in Biloxi are (from left), Dr. Charles Parkman, Dr. A. Jerald Jackson, both of Hattiesburg; and (far right) Dr. John D. Morgan of McComb. Dr. Bob G. Eaton (front), professor and vice-chairman, Radiologic Science Department, University of Oklahoma School of Medicine, served as radiologic consultant for the two-day conference, sponsored by Lung Associations and Thoracic Societies of Mississippi, Alabama and Louisiana.

Dr. Smith Named UMC Neurosurgery Chairman

Dr. Robert R. Smith, a native of Vicksburg, has been named chairman of the Department of Neurosurgery at the University of Mississippi Medical Center.



Dr. Smith

UMC Vice Chancellor for Health Affairs and School of Medicine Dean Dr. Norman C. Nelson announced Dr. Smith's appointment following approval of the Board of Trustees, State Institutions of Higher Learning.

An alumnus of Mississippi State University and Millsaps College, Dr. Smith earned the M.D. degree at the Medical Center in 1961.

He interned at Brooke General Hospital in San Antonio, and took residency training in neurosurgery at UMC from 1962-1967.

Dr. Smith, whose primary research interest is in the surgical treatment of stroke, is a former coordinator and codirector of the Mississippi Regional Medical Program's stroke program. He joined the Medical Center faculty in 1967 as an instructor.

The Mississippian is author or coauthor of 42 scientific papers. His articles have appeared in *Archives of Neurology*, *Southern Medical Journal*, *Journal of Neurochemistry* and *Journal of Neurosurgery*. He authored sections on neurosurgery and head and spinal cord injuries for the 1977 *Rhoads Textbook of Surgery*, and edited a book on subarachnoid hemorrhage in 1975. Another book, *Essentials of Neurosurgery*, is in preparation.

He is a member of the American Association of Neurological Surgeons section of cerebrovascular surgery, the American College of Surgeons, the Society of University Neurosurgeons and the Research Society of Neurological Surgery.

A past president of the Mississippi Neurosurgical Society, Dr. Smith serves on the research advisory and policy committee for the Mississippi Heart Association.

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Outstanding multi-hospital emergency group in practice for the past 12 years has excellent opportunities available in Greenville, MS located 2 hours from Jackson. Fly to MS, work 6 to 16 shifts, spend the other 20 days in CA. Fee-for-service. Malpractice insurance provided. If interested please call or write to: Garland Holloman, M.D., Office: 601-378-3783 or John D. Stein, Emergency Physicians, 897 MacArthur Blvd., San Leandro, CA. Telephone: (415) 638-3979.

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IN CONCLUSION

Almost \$40 per day (approximately 25% of the daily room charge) is added to hospital bills as a result of compliance with government regulations in New York State, and each registered nurse spends more than one day a week filling out forms for that state's regulatory agencies. The Journal of the Indiana Medical Association named an insurance newspaper as the original source, which claimed information was obtained from the New York Hospital Association.

The Department of HEW's proposed national health insurance plan received comment from AMA Executive Vice President James H. Sammons, M.D., who stated, "Current problems in the health care system are limited and do not justify a complete restructuring of private health service delivery mechanisms...the plan places undue emphasis on cost containment and would lead to both lower quality and rationed medical services and fails to recognize private sector initiatives."

Webster's Medical Office Handbook, written for the administrative side of medical offices, will be published this month. Its 18 chapters provide information on the completion of health insurance forms, writing of medical reports and manuscripts, management of difficult patients, improvement of bookkeeping techniques, office organization, time management and appointments, medical records, task organization and medical correspondence. Cost is \$10.95.

In response to repeated jokes about doctors on the golf course, the American Medical Association conducted a poll of its members, and the results, reported "Moneysworth" magazine, contradict the jokes. The American Medical Association found that physicians prefer jogging, playing tennis and swimming over golf. The article stated that the American Medical Association discovered that fewer than 11 percent of the physicians polled play golf.

A study conducted by the Department of Health, Education and Welfare indicates that the nation is pouring an increasing amount of tax monies into care of the elderly. In 1977 persons over 65 made up 11% of the population and accounted for 29% of all public and private health spending, a 25% increase since 1967. The increase reflects a larger aged population which is growing faster than working age groups whose taxes are supporting public health systems.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and

acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. Oral—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

synonymous with relief of anxiety

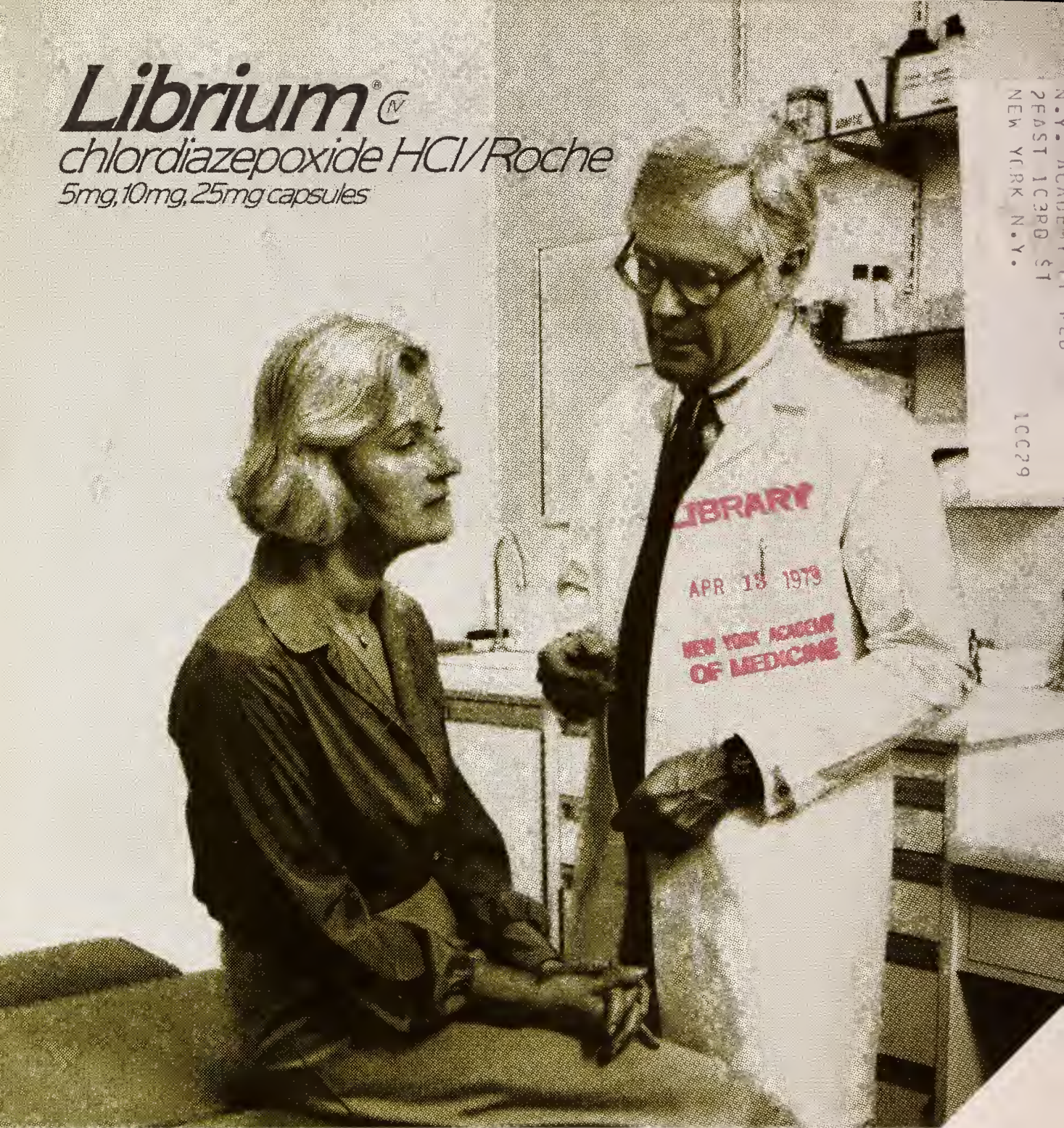
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Please see preceding page for a summary of product information.

May 1979

BALCONY

Journal of the
State Medical
Association

Mississippi

(ISSN 0026-6396)

Contents:

Rehabilitation in
Burns

CDU: Concerned with
Rehabilitation of the
Chemically Dependent
Person

Gray Scale Ultrasound
Diagnosis of
Trophoblastic Disease



THE MESSAGE OF TENSION

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Indications: tension and anxiety states, somatic complaints which are concomitants of emotional factors, psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation, symptomatic relief of acute agitation, tremor, delirium tremens and hallucinations due to acute alcohol withdrawal, adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; ataxic, stiff-man syndrome, convulsive disorders (not for sole therapy).

The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication, abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed, drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or over-sedation.

Side Effects: Drowsiness, confusion, diplopia,

hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neuroleptic jaundice, periodic blood counts and liver function tests advisable during long-term therapy.

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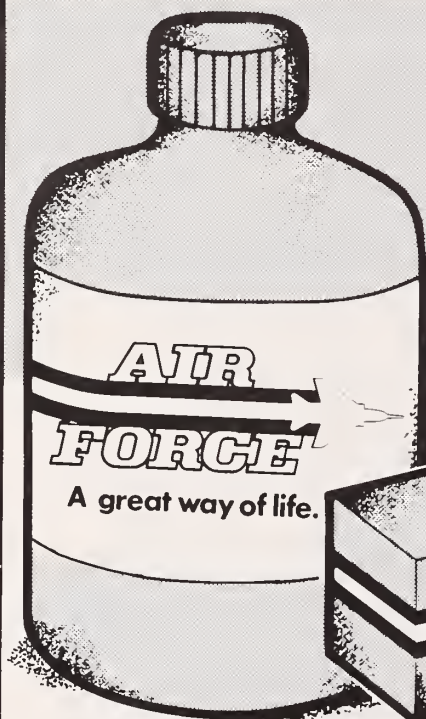
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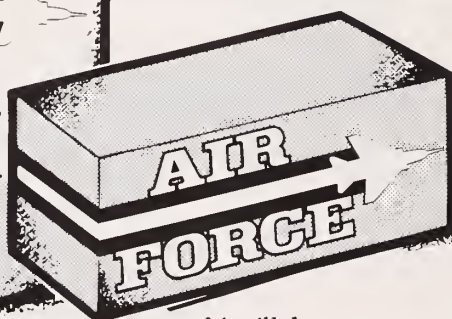


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Number 5

May 1979



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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(ISSN 0026-6396)

AMA Schedules Workshop On Chronic Mentally Ill

The American Medical Association will sponsor a workshop on "Physicians and Chronic Mental Patients: Potentials for Community Based Care," May 10-11, 1979 at the Palmer House in Chicago. Participants will focus on identifying priorities in medical education as they relate to the physician's role in providing comprehensive care to patients with long-term or severe mental disabilities.

Attending the workshop will be physicians from a variety of specialties including pediatrics, psychiatry, family practice, internal medicine and emergency medicine, as well as administrative staff involved in directing medical education programs in medical schools and hospitals. Other participants will include medical students, residents, and professionals in the mental health and human service fields.

For additional information, contact Ms. Suellen Muldoon, Associate Director, Department of Mental Health, American Medical Association, 535 North Dearborn Street, Chicago, IL 60610.

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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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Hartford, Connecticut
- May 2-5 **Medical & Chirurgical Faculty of the State of Maryland**
Hunt Valley Inn
Hunt Valley, Md.
- May 3-5 **Oklahoma State Medical Association**
Williams Center
Tulsa, Oklahoma
- May 3-6 **Texas Medical Association**
Dallas, Texas
- May 3-6 **Kansas Medical Society**
Holiday Inn-Holidome
Hutchinson, Kansas
- May 3-6 **North Carolina Medical Society**
Pinehurst Hotel
Pinehurst, North Carolina
- May 4-6 **Michigan State Medical Society**
(House of Delegates)
Kalamazoo Center Inn
Kalamazoo, Michigan
- May 6-10 **Mississippi State Medical Assoc.**
Biloxi Hilton
Biloxi, Mississippi
- May 10-12 **Wisconsin State Medical Society**
Marc Plaza
Milwaukee, Wisconsin
- May 16th **Rhode Island Medical Society**
Biltmore Plaza Hotel
Providence, Rhode Island
- May 17-18 **Minnesota Medical Association**
St. Paul, Minnesota
- May 23-27 **Florida Medical Association**
The Diplomat Hotel
Hollywood, Florida
- June 6-8 **Alaska State Medical Association**
Shee Atika
Sitka, Alaska
- June 7-10 **South Dakota State Medical Assoc.**
Howard Johnson
Rapid City, South Dakota
- June 16-19 **Maine Medical Association**
Samoset Resorts
Rockport, Maine
- June 18-20 **Iowa Medical Society**
Tan-Tar-A Resort
Osage Beach, Missouri
- June 27 **Chicago Medical Society**
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Schiller Park, Illinois

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Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg, bismuth subgallate, 22.5 mg, bismuth resorcin compound, 17.5 mg, benzyl benzoate, 12.0 mg, Peruvian balsam, 18.0 mg, zinc oxide, 110.0 mg, also contains the following inactive ingredients: propylene glycol, bismuth suboxide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani. Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol[®] Suppositories or Ointment.

Contraindications: Anusol-HC[®] Suppositories and Anusol-HC[®] Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnosis or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

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Dosage and Administration: Anusol-HC

Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning

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NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24), in silver foil strips with Anusol-HC W/C printed in block.

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NEWSLETTER

May 1979

Dear Doctor:

Continuing medical education in gastroenterology and obstetrics and gynecology became available last month through Dial Access - a toll-free, 24-hour, seven-day-a-week program to keep physicians abreast of the latest developments in medicine. The program, developed by the Southern Medical Association, has been approved for continuing medical education credit by the AMA, the American College of Obstetricians and Gynecologists and the American Osteopathic Association.

The recorded messages are about 10 minutes long, and monographs are also available. The project was funded by a grant from Ortho Pharmaceutical Corp. Brochures describing the tapes are available from the Product Director, Educational Programs, Ortho Pharmaceutical Corp., Raritan, NJ 08869.

American Medical News reports that Sen. Kennedy has formally given up his efforts for a federally financed national health insurance program in favor of what is termed "a totally new approach" which retains private health insurance and is financed largely by the private sector. Federal controls are included, however. Demands for budget-cutting and inflation were credited with the change.

Several catastrophic coverage NHI plans are proposed in Congress. AMA is seeking amendments to two of them, and will support these bills if amendments are adopted. Senate Finance Chairman Russell Long has modified his suggested catastrophic measure, giving private health insurance a larger role, and eliminating a controversial pay-roll tax feature. Republican members of the Finance Committee support a similar bill.

The Carter Administration is expected to submit still another national health insurance bill, and it is expected to emphasize catastrophic coverage, as well. It will have new hospital and physician cost control features, and will establish a federal house insurance program called HealthCare, designed to supersede Medicare and Medicaid eventually. The five-phase plan calls for no federal expenditures until 1983.

Energy Chief James Schlesinger recently urged all Americans to conserve energy by limiting travel. A newsletter notes that ironically, later that same week he requested a \$4 million increase in his own department's budget to meet additional travel expense. The Washington Post notes that the U.S. government operates the world's most lavish motor pool: 450,000 civilian vehicles, or 1 for every 6 federal employees.

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Managing Editor

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the pathogens

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Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



A reminder

ZYLOPRIM[®]

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim[®] (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol[®] (mercaptopurine) or Imuran[®] (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age: Zyloprim[®] (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular: There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim[®] (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic: There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVERDOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIED: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)



Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

COMPATIBILITY



Does it influence your choice of a peripheral/cerebral vasodilator*?

- Vasodilan — compatible with coexisting diseases
- Vasodilan — compatible with concomitant therapy
- Vasodilan — compatible with your total regimen for vascular insufficiency

***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily. Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls

U.S. Pat. No. 3,056,836

VASODILAN[®]

(ISOXSUPRINE HCl)
20-mg tablets

MeadJohnson PHARMACEUTICAL DIVISION

© 1978 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. MJL7-4268

**When painful spasm
is the presenting
symptom...**



...in the functional bowel/irritable bowel syndrome*

Bentyl[®]

(dicyclomine hydrochloride USP)

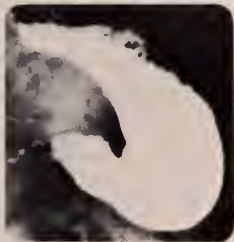
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

“The correlation of spasm relief and drug given was excellent.”

*This drug has been classified “probably” effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

Bentyl[®]

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis, myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis, urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg capsule and syrup: Adults 1 or 2 capsules or teaspoonfuls syrup three or four times daily. Children 1 capsule or teaspoonful syrup three or four times daily. Infants: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg: Adults 1 tablet three or four times daily. Bentyl Injection: Adults 2 ml (20 mg) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine[®] (bethanechol chloride USP) should be used.

Product Information as of October, 1978

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Switzwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Ocaturo, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

CHAMPUS Is Using 80th Percentile

On April 1, CHAMPUS contractors began using 80th percentile figures to determine the maximum amount allowable for claims involving services received from physicians and other individual providers (noninstitutional claims), according to program officials.

The 80th percentile is an amount high enough to cover usual charges reflected in at least four out of every five bills from physicians and other individual providers in a specific geographic area during the previous calendar year for a specific service.

The FY 1979 Defense Appropriations Act allows CHAMPUS to set the maximum amount allowable for any claim at a figure that is not more than the 80th percentile. Defense appropriations acts for the two previous years had limited that amount to a figure no higher than the 75th percentile.

CHAMPUS officials also announced that contractors will review each payment for services provided after October 1, 1978, and paid by CHAMPUS before April 1, to determine if the amount can be adjusted upward on the basis of the 80th percentile figure. If it can, a supplemental payment will be made.

The review will be automatic and beneficiaries will not have to take any action. Within the next few months, each person who had a claim paid by CHAMPUS before April 1 for care provided after October 1, 1978, will receive a new Explanation of Benefits (EOB) from the CHAMPUS contractor. The EOB will present the results of the review. If the review indicates that the allowable amount can be adjusted upward, a check will be enclosed with the EOB. Not every prior payment will be affected by the change of the 80th percentile.

Come Help Us Celebrate The Child

St. Jude Children's Research Hospital continues its search for life-saving knowledge about childhood diseases. And this search continues because people care. Help us celebrate the child by sending your tax-deductible check or request for further information to St. Jude Children's Research Hospital, 539 Lane Ave., Memphis, TN 38105.



ST. JUDE CHILDREN'S RESEARCH HOSPITAL
Danny Thomas, Founder

DATELINE

Darvon Ban Chicago, IL - John C. Ballin, Ph.D., director of AMA's
Inappropriate Department of Drugs, has declared that there is no evidence
to show that Darvon is not safe and effective when taken as
directed, and that it would be inappropriate to ban the drug without a full scientific study. The demand by a Ralph Nader affiliate for an immediate ban of the drug as an imminent hazard to the public health prompted Dr. Ballin's remarks. He pointed out that the drug had already been studied by the Drug Enforcement Agency in 1976.

NIH Funds Dallas, TX - The National Institute of Health is funding a
Diabetes Study research unit for the study of diabetes, with the Pima Indians of Arizona as subjects. Fifty percent of the Pimas aged 35 years and older are diabetic - 15 times the overall U.S. rate - and almost all adult Pimas are obese. Results of the study of genetic risk factors and obesity are expected to be applicable to a large majority of diabetics, since most Pimas develop the adult-onset type, which afflicts 90% of all diabetics.

AMA Publications Chicago, IL - The American Medical Association is making
Lists Available available two free pamphlets on AMA publications. One, entitled "Professional Medical Information," is designed for the physician and refers to publications on medical practice, general and scientific subjects and statistical data. The other, "AMA Publications...to Help You Lead a Healthier, Happier Life," is for the general public. Both may be ordered from AMA's Order Department, P.O. Box 821, Monroe, WI 53566.

Rubella Outbreaks Jackson, MS - The widespread use of rubella live-virus
At Colleges vaccine in Mississippi children since 1969 has reduced the number of cases in young children, but colleges continue to be sites of rubella outbreaks. Figures from Mississippi State University for 1978 show a total of 110 cases diagnosed at the student health center, and an untold number which never sought medical attention. Other colleges also reported outbreaks. Thus far this year over 30 cases have been reported at Southern.

Alcohol-Cancer Link Rockville, MD - Initial evidence that alcohol can act to
Study Urged increase the risk of cancer needs additional research, concluded participants at a recent workshop sponsored by the National Cancer Institute and the National Institute on Alcohol Abuse and Alcoholism. Data presented attested to an association between drinking and cancer, and indicated that alcohol may play a role by irritating body tissue, potentiating viral effects or perhaps by weakening the body's immunological system.

V-Cillin K[®]

penicillin V potassium

is the most
widely prescribed
brand of oral penicillin



Tablets
125, 250, and 500 mg*
Oral Solution
125 and 250 mg*/5 ml

V-Cillin K[®]
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies

before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

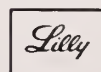
Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin.

(102175)

***Equivalent to penicillin V.**

Additional information available to the profession on request.



Eli Lilly and Company
Indianapolis, Indiana 46206

900416

Saluron® • **Salutensin®** • **Salutensin-Demi™**
 (hydroflumethiazide 50 mg.) (hydroflumethiazide 50 mg./reserpine 0.125 mg.) (hydroflumethiazide 25 mg./reserpine 0.125 mg.)

the family of antihypertensives completing the therapeutic pyramid

Cost

According to a recent study,¹ Salutensin® (hydroflumethiazide 50 mg./reserpine 0.125 mg.) was the most economical "step two" therapy...about $\frac{1}{3}$ the cost of a day's supply of thiazide + methyl dopa or thiazide + propranolol.²

Dosage titration

Salutensin contains the recommended effective doses of both its components, requiring minimal titration.

Duration of action

Salutensin contains Saluron (hydroflumethiazide), an intermediate-acting thiazide diuretic, which works over an 18-24 hour period, ideal for once-daily therapy.

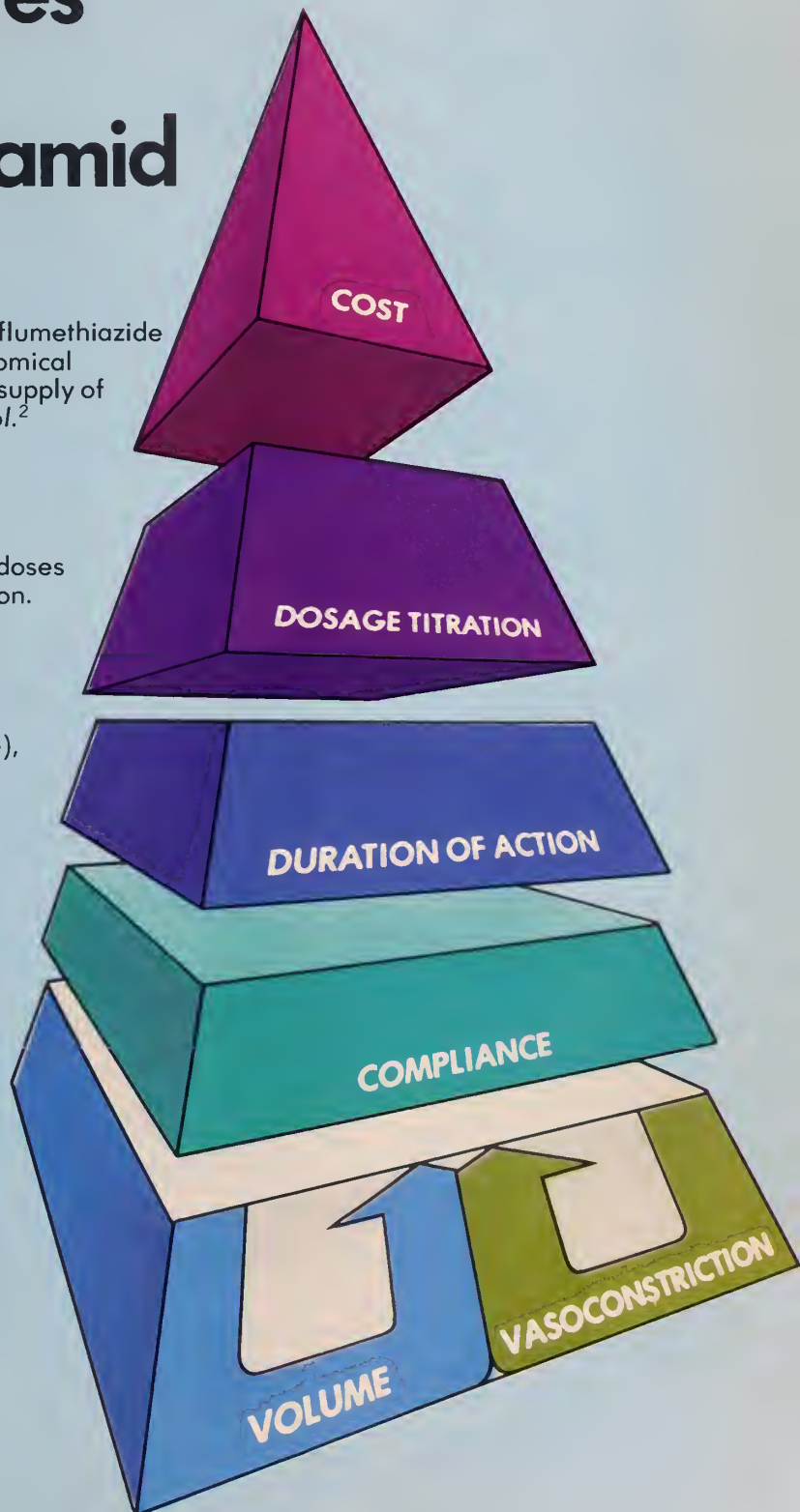
Compliance

The total daily dose can be given once a day. Compared with multiple-daily-dosage medications, the chance of a missed dose is greatly reduced.

Volume/vasoconstriction

At the foundation of "step two" hypertension therapy, control of both circulating volume and peripheral resistance can be effectively achieved with the combination tablet Salutensin one day at a time.

References: 1. Finnerty, F.A. et al.: Step 2 Regimens in Hypertension, J.A.M.A. 241:579, 1979.
 2. Red Book 1979.



BRISTOL™

BRISTOL LABORATORIES
 Div. of Bristol-Myers Company
 Syracuse, New York 13201

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For a summary of prescribing information, please see following page.

Saluron®

(hydroflumethiazide 50 mg.)

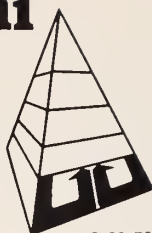
Salutensin®

(hydroflumethiazide 50 mg./reserpine 0.125 mg.)

Salutensin-Demi™

(hydroflumethiazide 25 mg./reserpine 0.125 mg.)

structured for the long run in "step two" hypertension



5/20/75

Saluron® (hydroflumethiazide)

For complete information consult Official Package Circular.

CONTRAINDICATIONS: Patients with anuria, oliguria, or hypersensitivity to this or other sulfonamide derived drugs.

WARNINGS: Saluron should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Thiazides may be additive or potentiative of the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in pregnancy: Usage of thiazides in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing mothers: Thiazides cross the placental barrier and appear in cord blood and breast milk.

PRECAUTIONS: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased or unchanged. Latent diabetes mellitus may become manifested during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effect of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS:

A. Gastrointestinal system reactions: Anorexia, gastric irritation, nausea,

vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis.

B. Central nervous system reactions: Dizziness, vertigo, paresthesias, headache, xanthopsia.

C. Hematologic reactions: Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

D. Dermatologic-Hypersensitivity reactions: Purpura, photosensitivity, rash, urticaria, necrotizing angitis (vasculitis) (cutaneous vasculitis).

E. Cardiovascular reaction: Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates, or narcotics.

F. Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

USUAL DOSE: The average adult diuretic dose is 25 to 200 mg. per day.

The average adult antihypertensive dose is 50 to 100 mg. per day.

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

HOW SUPPLIED: Saluron (hydroflumethiazide 50 mg.): Bottles of 100.

Salutensin® • Salutensin-Demi™

(12) 10/27/78

(hydroflumethiazide, reserpine antihypertensive formulation)

For complete information consult Official Package Circular.

WARNING

This fixed combination drug is not indicated for initial therapy of hypertension. Hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage determined, its use may be more convenient in patient management. The treatment of hypertension is not static, but must be reevaluated as conditions in each patient warrant.

CONTRAINDICATIONS: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

WARNINGS: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients.

Use in pregnancy: Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fetal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

PRECAUTIONS: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss may cause digitalis intoxication. Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or bronchial asthma and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being pre-diabetic should be kept under close observation if treated with this agent.

ADVERSE REACTIONS: Hydroflumethiazide: Skin-rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. **Reserpine:** Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares.

USUAL DOSE: 1 tablet b.i.d.

HOW SUPPLIED: Salutensin (hydroflumethiazide 50 mg., reserpine 0.125 mg.): Bottles of 100 and 1000.

Salutensin-Demi (hydroflumethiazide 25 mg., reserpine 0.125 mg.): Bottles of 100.

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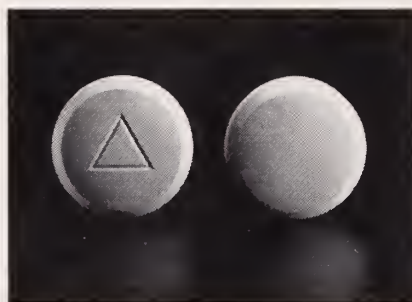
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The Maker

Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally “expensive” and generic versions are relatively “cheap.” To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.



MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were

not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

MYTH: Industry favors only “expensive” brand names and denigrates all generics.

FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.

Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.



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ORIGINAL PAPERS

Rehabilitation in Burns

NANDA K. VEMIREDDI, M.D.,
Kansas City, Missouri

IT IS ESTIMATED that in the United States 2,000,000 burned patients seek medical attention annually, and 70,000 to 100,000 need hospitalization. Five to 10% of these hospitalized patients die each year as a direct result of the thermal injury. The overall morbidity and mortality from fire in this country is the second highest in the world and the highest among industrialized nations. Successful management of burn victims requires a dedicated team of physicians, nurses, therapists and paramedical personnel and a knowledge of the pathophysiology of the burn injury allowing sound management principles.¹

Significant changes have been seen in the field of burn medicine in the past 25 years. Prehospital care and rescue have been standardized in most communities of the United States. Pathophysiology of burn shock and fluid therapy are better understood now. Topical antimicrobial agents and judicious use of systemic antibiotics have decreased burn wound colonization and death from sepsis. All these factors have reduced the mortality from thermal injuries. The increase in burn survival rate has not necessarily reduced the late morbidity in thermal injury victims. Burn wounds heal with scar and survivors of major burns may have to live the rest of their lives with hypertrophic scars and disabling contractures.²

Contractures and hypertrophic scars are the two most frustrating sequelae of thermal injury. Extensive studies conducted at the Shriners' Burn Institute in Galveston, Texas, have indicated that more than 80% of the patients who have suffered second and

third degree burns will develop hypertrophic scarring throughout the burn areas after new skin and grafts have healed. If no attempt is made to control

Significant changes have been seen in the treatment of burns during the past 25 years. The mortality rate from thermal injuries has been reduced, but survivors of burn wounds may have to live with scars and disabling contractures. The author discusses the pathophysiology of burns scars, and describes methods for the prevention of hypertrophic scar contracture formation.

the development of scar hypertrophy, crippling disfigurement is likely to occur due to severe contractures and the unchecked formation of thickened, knobby, red scar tissue (see Figure 1). In normal burn-wound healing, there is a great increase in vascularity to form the granulation tissue which the body uses to restore the damaged skin site. Studies done by Linares at the Shriners' Burn Institute indicate that the granulation tissue shows an increase of fibroblasts.

Pathophysiology of Burns Scar

In the development of normal skin dermis, fibroblasts appear to be irregular in shape and flat with a lumpy surface. But the fibroblasts which develop within the reticular layer of a hypertrophic scar are spider shaped with nodular rounded body. These fibroblasts produce an excessive amount of collagen

From the Department of Rehabilitation Medicine, Veterans Administration Medical Center, Kansas City, MO.
Pictures provided by the Jobst Institute.

fiber which entwine with each other to produce whorl-like patterns. In addition to the irregular shape of the nodules, the hypertrophic scar will synthesize collagen at more than four times the rate of normal skin. It is this pile-up of collagen-filled nodules

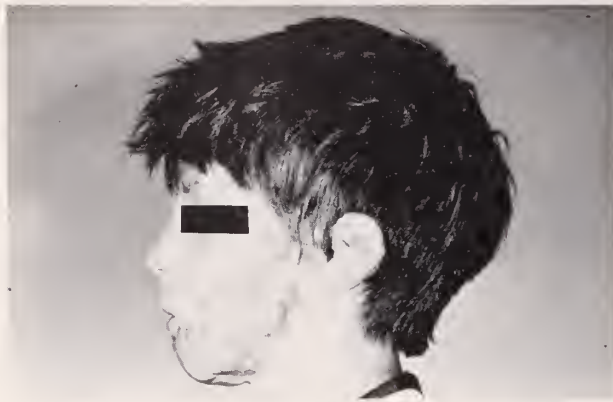


Figure 1

which gives rise to the thickened rigid hypertrophic scar which later can cause contractures.³ It has been known for some years that the application of controlled, consistent pressure to the surface of an immature hypertrophic scar will in time reduce the scar and leave a smooth, pliable skin surface. Research studies suggest that the application of pressure decreases the rapid blood flow through the vascular bed, thereby preventing an uncontrollable proliferation of fibroblasts and the excessive collagen buildup characteristic of hypertrophic scar.

Prevention of Hypertrophic Scar Contracture Formation

During the pregrafting phase the primary therapy consists of positioning and splinting. Splints fitted upon admission will require revisions as edema subsides. Third degree burns of the neck may contract until the chin is drawn onto the chest and this should be prevented by avoiding flexion of the neck as far as possible. The neck should be positioned in slight extension and no pillow should be used on the bed of the patient who has burns about the neck. Axillary contractures are the most difficult contractures to prevent in a burn patient, and the possibility of these can be minimized by positioning the patient with the arms at 90° of abduction at the shoulder and 10° of flexion to avoid anterior dislocation. Elbows and knees can easily be splinted using a simple three-point splint. These splints should be worn as long as possible during the day and should be taken out only when the patient is ambulating.⁴

During the grafting and for two to three weeks

following grafting, the patient's extremities are positioned in a fashion similar to the pregrafting phase. For grafts to the neck, hyperextension can be maintained with the head off a short mattress.

As mentioned earlier, the application of pressure decreases the chance of increased scar formation. Initially, pressure dressings and the elastic Ace wraps were tried but these materials slipped, bunched up, stretched or came loose. In 1960, Jobst Institute developed a special Dacron spandex Bobbinette fabric to be used in the construction of custom fitted pressure gradient garments. The Bobbinette fabric is unique in that it is porous and not occlusive. Its elastic weave was especially designed to provide tridimensional control by employing unidirectional tension threads wrapped with prestressed fibers permitting maximum pressure effectiveness. Garments constructed from this new fabric, when accurately measured, fit, and consistently worn by the burn patient, provide and maintain adequate pressure to prevent hypertrophic scar formation. The multidirectional stretch of the fabric also allows any normal movement of the body. The garments are custom-made and tailored for each patient, providing a gradient pressure on the burn scar area which just exceeds the interstitial pressure within the healing tissue. This early, continuous pressure prevents hypertrophic scar formation and can diminish and control immature hypertrophic scarring up to six months post burn.

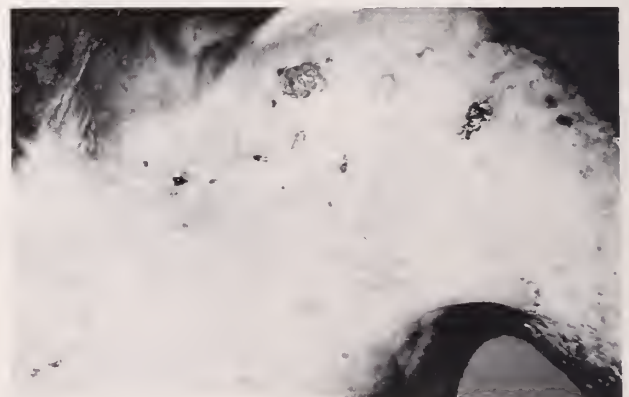


Figure 2

The measurement and fitting of pressure gradient garments may begin as soon as the open areas of newly healed scar tissue are reduced to the size of a quarter (see Figure 2). The garments can then be made to apply pressure directly over the burn areas including an entire body extremity. The healed areas should be measured and garments ordered as early as possible leaving large unhealed areas for measurement at a later date.

Of all the body parts, the face is the most difficult area in which to achieve adequate pressure. Because of underlying bone structure, the forehead and mandible line are the only areas where sufficient pressure is guaranteed (see Figure 3). If the soft areas around the mouth, nose and chin are a part of these extensively damaged areas, additional materials, such as



Figure 3

molded low temperature plastic or a high density foam, such as Spenco padding (see Figure 4) would have to be inserted under the mask to guarantee consistent, adequate pressure to all burn areas. When moderate anterior neck burns are present, a soft neck support can be used to prevent cervical contractures, and at the same time apply pressure.

Whenever possible, efforts should be made to measure a patient for garments before hospital discharge. If body weight increases more than 15 pounds, remeasuring is necessary. The garments should be carefully hand washed, rinsed, then gently squeezed or rolled into a Turkish towel to remove excessive moisture. They should then be hung up to dry. They should never be put in a dryer, as exces-

sive heat will quickly damage the elasticity. With proper care, Jobst garments have an average life of three months. Daily washing is not only important to



Figure 4

the life and usefulness of the garment, but is also essential to prevent any infection underneath the garment. Petroleum based lotions are discouraged because they can damage the elasticity of the fabric. To be fully effective, pressure gradient garments should be worn until the scar tissue is mature. Depending on the patient, this process could take from 9 to 14 months. Patient acceptance of such garments may be a problem initially, but once the patient realizes that the garments give him mobility and reduce the mortal discomfort, there is very little difficulty in persuading the patient to wear this for nearly 24 hours a day.

Static and dynamic splinting is another method of reducing and preventing burn scar contractures. Static splints also have disadvantages such as joint stiffness, and patients are instructed to remove the splints and go through the full range of motion at least three times each day. Dynamic splinting using elastic traction also has some of the disadvantages, and will have to be removed and reapplied periodically. Neck splints are extremely beneficial in treating and preventing neck scar contractures. Web spaces for thumb and fingers must be worn outside the elastic compression garment. The use of splints in active patients is usually restricted to night time when the patients are resting or sleeping. ★★★

4801 Linwood Boulevard (64128)

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CDU: Concerned With Rehabilitation of the Chemically Dependent Person

C. G. SUTHERLAND, M.D. and WILLIAM CROOKS
Jackson, Mississippi

IN MAY 1978, the House of Delegates of the Mississippi State Medical Association voted to institute a disabled physician's program in the State of Mississippi. In view of this action, it seems worthwhile to report to the membership on the status of the Chemical Dependency Unit (CDU) of the Mississippi Baptist Medical Center (MBMC). The CDU is concerned with the rehabilitation of alcoholics and other chemically dependent patients.

The Unit

In September 1976, the Mississippi Baptist Medical Center opened its Chemical Dependency Unit. The Unit is a part of and under the complete control of MBMC. The dormitory style building, formerly the Gilfoy School of Nursing, is located on the hospital grounds and offers complete living facilities, including its own cafeteria. At present, patient capacity ranges between 40 and 50 persons. This capacity can be increased in the future if the need arises.

Patients may be referred to the Unit by their personal physician, family, friend, judges or by themselves. The majority of patients come from Mississippi; however, some are referrals from adjoining southern states. All walks of life are represented, and ages have varied from 12 to 75.

As of January 1, 1979, the Unit had admitted 1005 patients. Of those, 598 have completed the entire

treatment program; 407 left early against the advice of the staff; 76 have been readmitted for additional treatment due to relapse of their illness.

A group of internists and family practitioners cover the unit on a rotating basis. Of course, if the patient has a preference, any staff member of the Medical Center is welcome to look after their medical needs and any staff member may be called as a consultant. Other than medical needs, the treatment program is carried out under the direction of William Crooks and his staff of lay counselors, most of whom are recovered chemically dependent persons. In addition, there is an ongoing counselors training program.

The CDU Committee of the MBMC, composed of active medical staff members appointed by the president of the staff, acts as a liaison committee between the Unit and the rest of the Medical Center.

The Program

Upon admission, the patient and/or the family are asked to agree to a minimal treatment period of at least 35 days. A personal rehabilitation program will be formulated for the specific needs of the patient. The length of time the patient will remain in this phase of the program will depend upon his condition and progress.

Each new patient receives a medical evaluation which includes a routine history and physical, as well as routine laboratory work and a drug screen. Many of the patients require detoxification and this is usually carried out within a few days, always under medical supervision. In addition to the routine medical evaluation, each patient is evaluated by a qualified psychologist at an appropriate time.

C. G. Sutherland, M.D., chairman of the CDU Committee of Mississippi Baptist Medical Center, is a practicing gynecologist in Jackson, MS.
William Crooks is director of the CDU of Mississippi Baptist Medical Center.

It is recognized that a small percentage of these patients (five to ten percent), comparable to the population as a whole, need psychiatric care. After detoxification, if the need for psychiatric care arises, consultation is sought from one of the staff psychiatrists and if necessary, the patient is transferred to a psychiatric facility. The Unit is not interested in or qualified for the treatment of the patient with serious emotional disorders.

After detoxification, treatment consists of lectures, movies, group therapy and one-on-one counseling. A real effort is made to include the family in this process since, as a rule, the family has also been subjected to the devastating effects of chemical dependency.

Following discharge from the Unit, the patient and the family are strongly encouraged to participate in such after-care programs as Alcoholics Anonymous, Alanon, Alateen and Narcotics Anonymous, as well as the outpatient after-care programs that are offered at the Unit itself. Finally, some patients are advised to go to so-called three-quarter-way houses for varying periods of time, prior to their full return to society.

Discussion

The thrust of the program at MBMC is to help the chemically dependent individual recover from the disease of chemical dependency — be that dependency alcohol, narcotics, tranquilizers, or any other mood altering chemical — and to be chemically free upon discharge from the Unit.

Among our patients alcohol is the drug that is most frequently abused, although one of the other drugs mentioned might be an individual patient's drug of choice, and indeed, polyaddiction is not rare.

Strictly speaking, this program is not primarily oriented toward medicine or religion, although it borrows heavily from both of these disciplines.

Probably the most accurate description of this particular program is that it attempts to get the chemically dependent person to accept his dependency and reach out to a way of life that allows him to remain not only sober and free of drugs, but comfortably so.

It is the current thinking of the staff of this Unit that chemical dependency represents an illness, part of which is a strong physical and psychological addiction, along with many other ramifications. From a treatment standpoint, the philosophy of this program is that it makes no difference whether addiction is to alcohol or one of the other mood altering chemicals.

In addition to the physical, mental, spiritual, social and economic effects upon the addict, frequently the disease has devastating effects upon the family, friends, employers and many others with whom he comes into contact. Its monetary cost is estimated to be in the hundreds of millions of dollars. It is considered to be a progressive, fatal illness unless arrested. Although there are literally hundreds of groups in this country that are active in the treatment of this disease, with varying degrees of success, no one group can point with pride and say, "we have the answer," in combating this most serious public health problem.

Chemical dependency defies accurate statistical analysis as to the results of treatment. As the founders of AA observed, "alcohol for the alcoholic is cunning, baffling, and powerful," and we feel that the same is true concerning other mood altering drugs insofar as the addict is concerned. We see little triumph when the alcoholic recovers from alcoholism, only to be allowed to become addicted to other drugs such as diazepam or chlordiazepoxide, recognizing of course that in some patients these drugs may be clearly, medically indicated. As previously stated, this type patient falls outside the realm of the treatment program that is offered at MBMC. We do feel, however, that the chemically dependent individual is particularly sensitive to any mood altering drug and may easily be converted from one drug addiction to another.

It is the opinion of the staff of the Chemical Dependency Unit that chemical dependency is a highly treatable disease, given proper instruction and motivation concerning the illness. It is recognized that this opinion is in contradiction to that held by most persons fifty years ago and still held by many today.

This program teaches that the alcoholic should never attempt to drink again, and that the use of any mood altering drug in the chemically dependent person is best used under strict medical supervision and for the shortest period of time that is compatible with good medical care. The patients are strongly urged to be completely candid with their physicians concerning their history of chemical dependency.

In conclusion, it must be admitted that the relapse rate among our patients is disappointing to the staff, as it must be to those who employ other treatment modalities. However, this disappointment is more than counterbalanced by the satisfaction which is obtained from seeing most of our patients restored to a normal, useful place in society. ★★

1225 North State Street (39201)

Radiologic Seminar CXCI: Gray Scale Ultrasound Diagnosis of Trophoblastic Disease

WILLIAM R. FORD, JR., M.D.

Jackson, Mississippi

ULTRASOUND is the procedure of choice in evaluating for hydatidiform mole since it is a rapidly performed, noninvasive study which has high sensitivity and specificity.¹

Pathology. Hydatidiform mole is a developmental abnormality of the placenta of unknown etiology, but it does follow a missed abortion or a blighted ovum. Pathological findings reveal a marked grape-like swelling of the placenta's villi and variable trophoblastic proliferation. Often large bilateral theca lutein cysts of the ovaries are present due to stimulation by the HCG elevation which results from the mole. Moles, having only a malignant potential, are the most benign of the trophoblastic diseases.

The term "invasive trophoblastic neoplasm" now includes invasive mole and choriocarcinoma due to their similarities. While 80% of moles follow a benign course, 16% give rise to an invasive mole, and a few (2.5%) develop choriocarcinoma. A mole never follows a normal outcome of pregnancy and only rarely coexists with a fetus, but a choriocarcinoma can follow any pregnancy — normal or molar. Statistically, 50% of choriocarcinomas are preceded by a mole; 25% follow an abortion; and 25% follow a normal pregnancy.¹

Clinical Description. The incidence of hydatidiform mole in North America is 1 in 2,000-2,500 pregnancies but is five times as prevalent in Asia and parts of Africa. The incidence is markedly increased in women over 45 years of age.

Bleeding and excessive vomiting in early pregnancy are clinical hallmarks. The uterus of at least 50% of the patients with a mole is too large for dates.² The mole usually destroys the fetus.

Early diagnosis and evacuation of the uterus are important to avoid the complications of a mole and in order to begin evaluation for the possibility of choriocarcinoma. HCG levels must be monitored for a year to ensure that they fall rather than rise, as they will if a choriocarcinoma is present.^{3, 4}

Ultrasound Appearance. The ultrasonic appearance of a mole closely resembles what would be expected by observing the gross pathology specimen (see Figure 1). Many of the dilated villi (hydatid vesicles) can be visualized on ultrasound images,

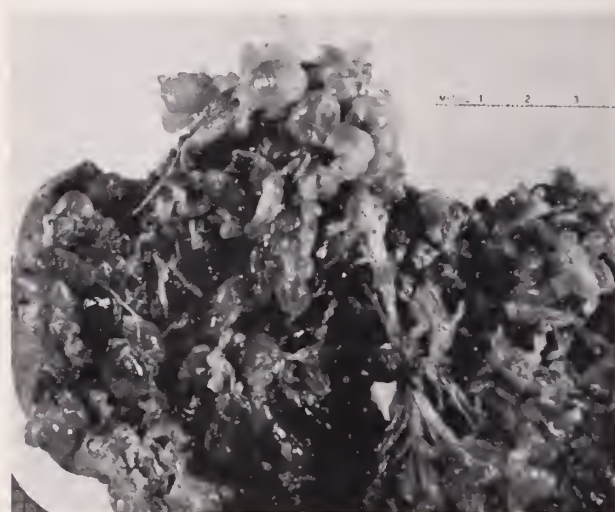


Figure 1. Gross pathology specimen of hydatidiform mole.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Woman's Hospital,
Flowood, MS.

giving the molar tissue a more edematous appearance than normal placental tissue (see Figure 2).

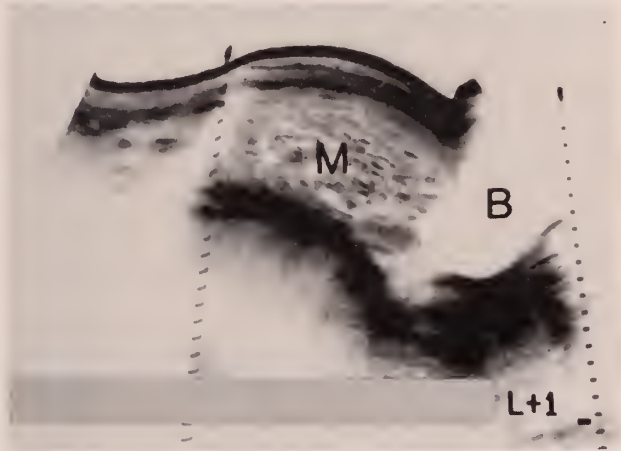


Figure 2. Longitudinal gray scale ultrasound scan of an uncomplicated hydatidiform mole (M). (B) indicates bladder.

With modern gray scale equipment and complete scanning of the uterus, a mole should not be mistaken for a normal placenta. Figure 2 also is typical of an "uncomplicated mole." That is, the tissue fills the uterus in a rather homogeneous manner.⁵

Many moles have a somewhat atypical appearance; in addition to the vesicular molar tissue appearance, there will be large intrauterine cystic spaces due to cystic degeneration and blood clot (see Figure 3). In these cases an incomplete abortion, degenerating fibroid, or an atypical teratoma would

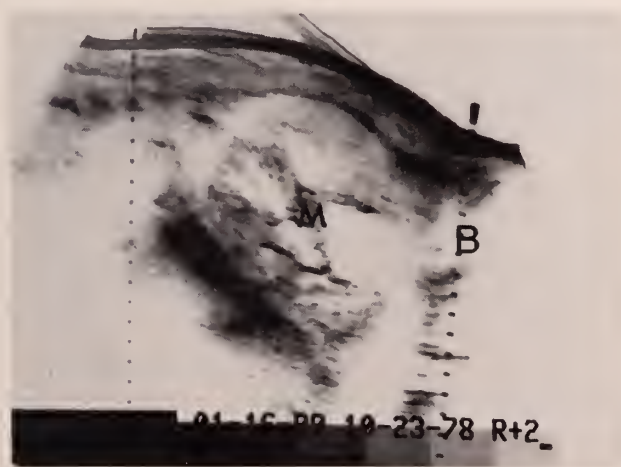


Figure 3. Longitudinal scan of a complicated mole with large cystic spaces probably representing blood clot (M). (B) indicates bladder.

be considerations, but the lack of elevated HCG can be used to rule them out; if theca lutein cysts can be seen (see Figure 4), there can be a more confident diagnosis of a mole. If a normal uterus can be seen separate from the mass in question, this can differentiate between a mole and a bizarre ovarian malignancy.

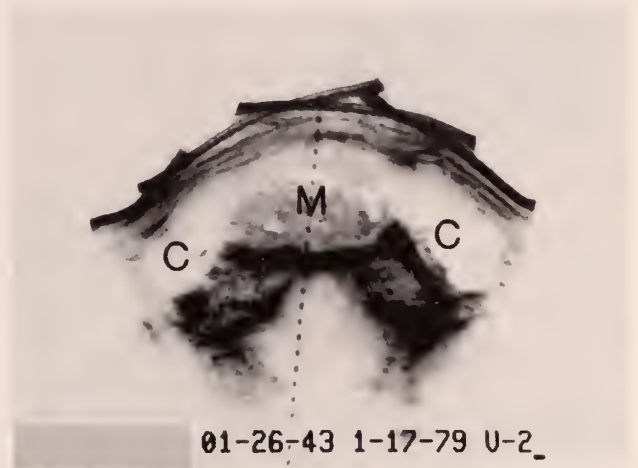


Figure 4. Transverse scan showing a mole (M) with bilateral theca lutein cysts (C) outside the uterus.

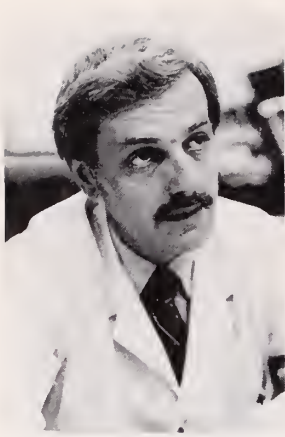
If, after a mole is evacuated, a villous pattern is again seen in the uterus, a diagnosis of invasive mole can be made, but a differentiation between the two *before* evacuation cannot be made. Persistence or enlargement of theca lutein cysts after evacuation of a mole is further evidence of an invasive mole or choriocarcinoma.¹ Most feel that there is no characteristic ultrasound appearance of a choriocarcinoma.

Summary. Trophoblastic disease is a spectrum of pathology. Ultrasound is now the definitive means of diagnosing hydatidiform mole. ★★★

1026 North Flowood Drive (39208)

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The President Speaking

Thank You for a Rewarding Opportunity

CARL G. EVERS, M.D.
Jackson, Mississippi

Thank You! To the members of MSMA, Jan and I wish to express our sincere thanks and appreciation. The courtesies extended to us by the officers and members of component societies in our visits with them during the past year were most considerate. But most of all, the opportunity to become familiar with the many and complex facets of the forces acting in Mississippi medicine today have been most rewarding. Although no formal certificate or diploma will result, I feel at least a hundred hours of Category I continuing education credits have been earned, and these were active, contact hours.

I wish to extend appreciation and a vote of confidence to the members and especially the chairman, Dr. Jack Atkinson, of the Committee to Study Health Needs in Mississippi. They have worked many diligent hours, and by the time this is published, the House of Delegates will have considered and passed on their efforts. It is this type of voluntary, dedicated, concerned and visible leadership, not only within the medical profession, but in the community in all its aspects, which will assure the continuation of excellence of health care in years to come. Such efforts by individual physicians to remain informed, to participate and to inform their patients will be the most effective measure in countering continued pressures to drastically alter a type of medical care which today is the best in the world.

Again, thank you for the opportunity to serve. It has resulted in receiving more than was given; hopefully the benefits can be returned in the years ahead.

Attitudes Affect Inflation Cure

Inflation may well be a greater threat to our national security than Communism, Middle East disturbance, or restrictive oil imports. In all recent surveys, it is the first concern of a majority of the American people. Rampant inflation can result in chaos — a situation that could well jeopardize the continuation of our system of government.

Our Congress continues to play politics, and Labor and Industry pursue their self-serving ways — all in utter disdain of our President's guidelines to establish some sane voluntary approach to this national emergency.

It appears that there are enough politicians in Washington who put their re-election and their power and party image ahead of their country's welfare, to adversely influence constructive legislation.

Seemingly, most blame President Carter for his inability to cope with this problem.

At the annual session of the Mississippi State Medical Association in 1978, we went on record encouraging our members to keep their fees at their level at the time, provided Labor, Industry and the Federal Government exhibited equal restraint.

I sincerely hope that the medical community at national, state, and local levels will do everything possible to support the President's guidelines. Whether it be fruitful or not, it will at least exemplify an attitude of true Americanism that seems so lacking in our society today.

W. MONCURE DABNEY, M.D.
Editor

The following article is a guest editorial by Dr. Arthur A. Derrick, a past president of the Mississippi State Medical Association. Comments and other viewpoints are invited.

The Editors

Medical Education — A Viewpoint

This will be my first excursion onto the editorial pages of the JOURNAL, a place more fitted to high pronouncements and exalted opinions than to my whims and grouses expressed in what Tate Carl called "salty" language. At the risk of being "laughed off the stage," I would like to herewith unburden myself of a few opinionated opinions and some possibly foolish notions.

In this era of push-button everything, including medicine, I bemoan the passing of the motivated, dedicated family physician. Perhaps he is an anachronism, as I may well be. But, there are a lot of "buts." Asses, too, for that matter. The schools are spewing out masses of the equivalent of "ninety-day wonders" to solve the problem of the "shortage" of physicians, which everyone knows is really a problem of distribution or placement. We have led the horse to the water, but he sure as hell ain't drinking! (I'm beginning to doubt if they ever will, as long as they are computer-selected with no real evaluation of motive, of true willingness to sacrifice, of the inborn urge to heal. In the Air Force, we used to wash out cadets with perfect 64's if they flunked the ARMA (adaptability rating for military aeronautics) which

was a one-on-one interview, and at least we won the war!)

Once in, they become so submerged in the drowning plethora of research-produced material that they don't have time to shave or get a haircut, as they try desperately to pack in enough to get by. Then they go on to the floors in rumpled scrubsuits and dirty sneakers, looking more like Frankenstein's helpers than acolytes of Hippocrates! Then out they come with visions of Cadillacs dancing in their heads, but unable or unwilling to perform a urinalysis, deliver a multipara or set a Colles' fracture.

I guess I've been around football coaches too long, but I'm a firm believer in "back to basics." It's well and good to know to a letter all the signs and symptoms of the rare syndromes that may come along once or twice in their medical life-times, and the values of myriad sophisticated lab tests that won't be available to them when they get the ivy out of their eyes and come on out here where the "consumers" are desperately in need of "providers." (And I hate that word.) It may be the greatest coincidence in the world, but as the number of family physicians or G.P.s falls through the attrition of age, atherosclerosis and overwork, the standing of the profession in all the polls also falls!

I never thought I would live to see the day that I would quote excerpts from Ann Landers, but these are priceless and so damned true — "The elements of caring, dedication and the ability to communicate to a patient what he needs to know are important . . . a little humility and aren't so damned sure of themselves (arrogant) . . . absolute honesty is a rare and precious quality." Somewhere along the way, we're losing some of this, and I don't presume to have the answer by any means. In our present milieu the science of medicine thrives, but the art of medicine is dying — slowly, steadily and surely. We cannot, we must not let this happen.

ARTHUR A. DERRICK, M.D.
Durant, MS

LETTERS

SIRS: As practicing allergists, we at the Mississippi Allergy Clinic consider it our responsibility to call to the attention of Mississippi physicians a very important new development for the diagnosis as well as the treatment of allergy to hymenoptera stings. (The order hymenoptera includes the honeybee, wasp, yellow jacket and hornet.)

Pure venom to each of the above is now available for diagnosis as well as treatment. Recent clinical studies have shown this venom to provide accurate skin test diagnosis of hymenoptera sensitivity (Hunt, et al, *Am. Int. Med.* **85**:56, 1976). It is also far superior to our current immunotherapy (whole body extract) in the treatment of hymenoptera allergy (Hunt, et al, *N. Eng. J. Med.* **299**:157, 1978).

Many patients in Mississippi suffer from hymenoptera allergy. We think it is imperative that each physician taking care of this type problem be aware of several pertinent points.

- To provide adequate protection, hymenoptera venom preparations must be given in high doses. This increases the possibility of severe systemic reactions during treatment. In some clinical trials, 15% of patients have had severe reactions while undergoing treatment with the venom. **Some patients have had systemic reactions to skin testing with the venom.** The patient should be fully informed by the physician of the risk involved and should be under the physician's constant supervision. The venom preparations should be used only in physicians' offices or settings where emergency equipment and appropriately trained personnel are *immediately* available to treat a severe anaphylactic reaction.
- The hymenoptera venom treatment should be restricted to patients who have previously experienced a potentially life-threatening systemic reaction to yellow jacket, wasp, honeybee or hornet. However, prior to treatment, the persistence of hymenoptera allergy *must* be confirmed by venom skin testing.
- Patients currently on allergy treatment to hymenoptera stings (whole body extract) should be completely re-evaluated (i.e., history, venom skin testing and counseling). If still allergic, then treatment with the pure venom should be started.

We hope that this candid discussion on the new developments will be helpful to Mississippi physicians.

DRS. BOOTH, COLE, MITCHELL, MOFFITT,
OWEN AND TRIPLETT
Mississippi Allergy Clinic, P.A.
940 North State Street
Jackson, MS 39201

JOURNAL MSMA encourages your participation. Comments, inquiries and suggestions are invited.

Medico-Legal Brief

New York High Court Rejects "Wrongful Life" Claims

New York's highest court has ruled that a parent has no cause of action on behalf of a child for "wrongful life," where a physician has failed to advise of an abnormality in the fetus. The parents may sue on their own behalf, however, if a physician's negligence has caused them damage.

The court reviewed two similar cases. In the first, a mother alleged that her obstetricians were negligent in failing to perform an amniocentesis, or even advise her of the availability of the test. She gave birth to a child with Down's Syndrome. She claimed that, had the physicians performed the test and determined that the child was so afflicted, she would have sought an early abortion.

The second case involved a mother who bore a previous child with polycystic kidney disease. Her physician allegedly advised her that such a disease was not hereditary, and that chances were "practically nil" that subsequent children would be born with this affliction. A second child was conceived, and was born with the same disease. Unlike the first child, who lived only 5 days, this child survived for two and a half years. The parents claimed that they would have avoided conception but for the physician's advice.

In both cases, the parents sued their physicians in the children's behalf claiming "wrongful life," and in their own behalf, for negligence in treatment.

The court separated "wrongful life" cases into three categories. The most common are those in which sterilization or contraceptive measures fail, i.e. "wrongful conception." Other cases have sought damages from physicians for failure to diagnose pregnancy early enough for the mother to choose to terminate the pregnancy. In still others, damages are sought (usually against the putative father) for causing a child to be born under the stigma of illegitimacy.

The court said that the two cases fell into none of these categories. These were not unwanted births, but fully intended. Nor was it contended that any negligence on the part of the physicians caused the infants' abnormalities. Therefore, the court concluded, the infants suffered no damages that were caused by the negligence of the physicians. Thus, the court dismissed the claims against the physicians made on the children's behalf.

The court did recognize, however, that the parents might have a claim against the physicians on their own behalf. If they could demonstrate that they were

damaged by the physicians' breach of a duty owed them, they could assert a valid claim for damages. The appeals court made no specific finding of liability, but sent the parents' cases back to the trial court for hearings on the issues of negligence and damages. — *Becker v. Schwartz*, No. 559 (N.Y.Ct. of App., December 27, 1978); *Park v. Chessin*, No. 560 (N.Y.Ct. of App., December 27, 1978)

NEW MEMBERS

HORN, PAUL L., New Albany. Born Winston-Salem, NC, Sept. 22, 1925; M.D., Bowman Gray School of Medicine, Winston-Salem, 1947; interned Charity Hospital, New Orleans, one year; radiology residency, Southern Baptist Hospital, New Orleans, 1954-55; radiology residency, Charity Hospital, New Orleans, 1955-57; elected by Northeast Mississippi Medical Society.

HUGHES, WAYNE A., Hattiesburg. Born Hattiesburg, MS, Oct. 2, 1949; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned UMC, Jackson, one year; elected by South Mississippi Medical Society.

IRWIN, DAVID HERMAN, JR., Tupelo. Born Tupelo, MS, April 24, 1950; M.D., University of Mississippi School of Medicine, Jackson, 1975; interned and internal medicine residency, Ochsner Foundation Hospital, New Orleans, 1975-78; elected by Northeast Mississippi Medical Society.

JEFFCOAT, BYRON THOMAS, McComb. Born Laurel, MS, Dec. 8, 1946; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned Baylor University Medical Center, Dallas, TX, one year; orthopedic surgery residency, UMC, Jackson, MS, 1974-76, and Parkland Memorial Hospital, Dallas, 1976-78; elected by South Central Medical Society.

KOSCO, PAUL IGOR, Greenwood. Born Akron, OH, Jan. 1, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned Baylor College of Medicine, Houston, TX, 1975; ophthalmology residency, UMC, Jackson, 1976-78; elected by Delta Medical Society.

MARTIN, ARTHUR M., JR., Meridian. Born Savannah, GA, Nov. 26, 1934; M.D., Duke University School of Medicine, Durham, NC, 1961; interned Duke Hospital, Durham, one year; pathology residency, same, 1962-65; elected by East Mississippi Medical Society.

NICHOLAS, WILLIAM C., Jackson. Born Nova Scotia, Canada, Sept. 4, 1934; M.D., Dalhousie University Faculty of Medicine, Halifax Nova Scotia, Canada 1958; interned Victoria General Hospital, Halifax, one year; internal medicine residency St. Johns General, Newfoundland, one year, Toronto General Hospital, 1959-62, Victoria General Hospital, Halifax, 1962-63; endocrinology fellowship, Middlesex Hospital, London, England, 1963-64; elected by Central Medical Society.

WEINBERGER, PHILLIP C., Vicksburg. Born Rossville, GA, Aug. 21, 1942; M.D., University of Alabama School of Medicine, Birmingham, 1974; interned and urology residency, Carraway Methodist Hospital, Birmingham, 1975-78; elected by West Mississippi Medical Society.

PERSONALS

JAIRO BARONA-Q. has associated with Physicians Association, Ltd., located at 500-I East Woodrow Wilson in Jackson, for the practice of internal medicine and nephrology.

JOHN R. BISE, III, of Jackson announces the opening of his office for the practice of gynecology at 4643 McWillie Drive.

LUIS BORRELL of Meridian received a plaque given by Meridian Junior College in appreciation of his service as the medical director of MJC's Respiratory Therapy Technician Program.

State Health Officer ALTON B. COBB of Jackson has been reappointed to his second consecutive term of office by the Mississippi State Board of Health.

ROBERT CURRIER of Jackson and UMC was an invited speaker at a recent symposium held in Tucson, Arizona, on the clinical management of amyotrophic lateral sclerosis.

JOHN W. DEGROOTE announces the relocation of his office for the practice of internal medicine and endocrinology to Suite 310, Doctors Plaza in Pascagoula.

CARL G. EVERS of Jackson and UMC was a program participant at the recent southern regional meeting of the Association of American Medical Colleges in Little Rock, Arkansas.

WALTER D. GUNN of Quitman has been accepted for another three-year membership in the American Academy of Family Physicians.

JAMES D. HARDY of Jackson and UMC, first vice-president-elect of the American College of Surgeons, attended a joint meeting of ACS and the Royal College of Surgeons in London, and met with other members of the executive committee of the International Society of Surgery in Brussels, Belgium, in March.

JAMES E. KEETON has joined the Jackson Urological Clinic for the practice of urological surgery and pediatric urology.

A room at Gulfport's Memorial Hospital has been designated in honor of M. S. LOVE, III, in recognition of his fifty years of service to the Gulfport community.

BEN F. MARTIN and JOHN H. PARKER announce the relocation of Columbus Pathology Laboratories to 306 Hospital Drive.

C. W. MCFATTER announces relocation of his office for the practice of gynecology to 3040 Indiana Avenue in Vicksburg.

WILLIAM H. MEYER of McComb was inducted as a fellow of the American Academy of Orthopaedic Surgeons at the academy's annual meeting in San Francisco.

ANDY MYRICK announces the opening of his office for the practice of surgery at the Physicians and Surgeons Clinic in Amory.

GEORGE PURVIS, JR., of Jackson, received the Mississippi College Distinguished Service Award in March.

DAVID D. RICHARDSON of Louisville announces the temporary association of his son, DAVID D. RICHARDSON, JR., in the practice of family medicine.

GEORGE V. SMITH of Jackson and UMC, state chairman of the field liaison program of the American College of Surgeons, attended a southern area meeting in Atlanta in March.

G. SEALE STEWART announces the relocation of his office for the practice of family medicine to Suite 4, Moore's Creek Office Plaza in Columbus.

W. LAMAR WEEMS and TERRY C. JOHNSON, both of Jackson and UMC, presented papers at the annual meeting of the Southeastern Section of the American Urological Association in Memphis in April, and Dr. Weems was elected to a three-year term as secretary of the association.

RAY WESSON of Biloxi was medical director of the fifth annual Gulf States Invitational Amateur Athletic Union boxing tournament, which was held at the Mississippi Coast Coliseum in April.

GEORGE W. WHARTON of Jackson and the Mississippi Methodist Hospital and Rehabilitation Center, recently led a course on "Skin Care" at the annual meeting of the American Spinal Injury Association in Atlanta.

BOBBY F. KING, KELLY S. SEGARS and KENNETH D. DRAPER of the Iuka Clinic announce the association of JAMES D. WILLIAMS, who will practice general medicine and obstetrics.

W. D. YOUNG announces the removal of his office, Wayne Surgical Clinic, to 921 Wayne Street in Waynesboro.

Memorial to Dr. Underwood Is Proposed

Keep Mississippi Beautiful proposes to dedicate one planting of the "Avenue of Magnolias" as a memorial tribute to Dr. Felix J. Underwood.

The project, begun four years ago, calls for 1,200 magnolia trees to be planted along the first 10 miles of each of the major highways leading into the state. To date, 19 entrances have been planted. Completion of the project will mean a total of 290 miles of Mississippi highway entrances planted with approximately 35,000 magnolia trees. The planting on Highway 78 is the proposed memorial to Dr. Underwood.

The "Avenue of Magnolias" is the major project of Keep Mississippi Beautiful, a non-profit organization founded in 1961 and dedicated to the task of making Mississippi a more beautiful state.

Planting and maintenance of the "Avenue of Magnolias" is a joint effort of the Mississippi State Highway Department, Garden Clubs of Mississippi, Mississippi Forestry Commission and Mississippi Department of Agriculture and Commerce.

Funding is through private contributions. The expense of an entire planting is approximately \$2,500. Keep Mississippi Beautiful seeks the financial support of Mississippi medical professionals in order to complete the memorial to Dr. Underwood. Contributions may be mailed to P. O. Box 1609, Jackson, MS 39205.

Review A Book

The following books have been received by the MSMA Headquarters Office. Medical readers (members of MSMA) interested in reviewing any of these volumes should address their requests to Editor, THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, P. O. Box 5229, Jackson 39216. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to the JOURNAL a review for publication.

Norethindrone: The First Three Decades. Prepared by the Medical Services Department of Syntex Laboratories, Inc., 1978. No cost.

Physician's Handbook: Nineteenth Edition. By Marcus A. Krupp, M.D., Norman J. Sweet, M.D., Ernest Jawetz, M.D., Edward G. Biglieri, M.D., Robert L. Roe, M.D., and Carlos A. Camargo, M.D. Los Altos: Lange Medical Publications, 1979. \$9.00.

The Health Robbers. Second Printing. By Stephen Barrett, M.D. and Gilda Knight. George F. Stickley Co., 1978.

Current Medical Diagnosis and Treatment. By Marcus A. Krupp, M.D. and Milton J. Chatton, M.D. Los Altos: Lange Medical Publications, 1979. \$18.00.

Everything You Always Wanted to Know About Nutrition. By David Reuben, M.D. Simon and Schuster, 1978. \$9.95.

Current Obstetrics and Gynecologic Diagnosis and Treatment. 2nd edition. By Ralph C. Benson, M.D., Los Altos: Lange Medical Publications, 1978. \$18.00.

The Health Practitioner in Family Relationships. By Eugenia L. Gullick, Ph.D., and Steven F. Peed, Ph.D. Westport, CT: Technomic Publishing Co., 1978. \$15.00.

General Urology. 9th edition. By Donald R. Smith, M.D. Los Altos: Lange Medical Publications, 1978. \$14.50.

Webster's Medical Office Handbook. By Anne H. Soukhanov. Springfield, MA: G. & C. Merriam Co., 1979. \$10.95.

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

MEDICAL ORGANIZATION

1979 Legislature Was Active in Health Matters

The 1979 Regular Session of the Mississippi Legislature will go in the records as one of the most active in recent times in regard to health legislation.

After several years of debate over which state health agency should administer the state certificate of need health planning process, the legislature opted to create a new Health Care Commission. In an undisguised rebuff of Governor Finch, the legislature also effectively removed control of the new Commission from the executive branch of government by providing that the Governor would only appoint two of the seven-member board of the commission, which will be composed of four "consumer" and three "provider" members.

Dr. Alton B. Cobb, State Health Officer, was named in the legislative act creating the commission as one of the latter. Other provider members are Dan Williford, chief executive officer of the North Mississippi Medical Center at Tupelo and Dr. Jack A. Atkinson, Brookhaven, a past president of MSMA.

On other health matters, the legislature acted to provide insurance coverage for emergency transportation of newborns, and established a program in the Mississippi State Board of Health to fund such transportation for newborns of the medically needy. A bill to establish a statewide newborn screening program for hypothyroidism and PKU was also passed. All three legislative proposals were sponsored by MSMA.

On another controversial subject the legislature acted to provide for generic substitution. Debate on this matter centered around passage of a medical and pharmacy supported bill to provide a two-line prescription form for the physician to sign indicating whether substitution was permitted or not, as opposed to requiring the physician to write "medically necessary" on any brand name prescription. The provision for the two-line form won, even though the legislature later, in another bill, specified that all Medicaid prescriptions must be filled generically.

In another controversial area, the legislature acted to require insurance companies to pay for services of nurse practitioners functioning in an expanded role

according to rules and regulations established by the Mississippi Board of Nursing and Mississippi State Board of Health. Observers feel the bill will have little meaningful effect since nurse practitioners in the expanded role function under a protocol requiring physician cooperation, and the only meaningful federal reimbursement program for services of such practitioners requires payment to be made as a clinic service.

UMC OB-Gyn Alumni Group is Formed



Former residents in the University of Mississippi Medical Center Department of Obstetrics and Gynecology formed an alumni group and elected officers in conjunction with a two-day scientific assembly at the Medical Center in March. Officers are Dr. Calvin Hull of Jackson, top left, president; Dr. Walter Bourland of Tupelo, top right, member of the board of directors; Dr. Jack Blackburn of Picayune, bottom left, member of the board of directors; and Dr. Rodney Meeks, UMC instructor in ob-gyn, secretary-treasurer. Not pictured is Dr. John Kitchings of Jackson, vice-president.

May Is High Blood Pressure Month

May 1979 has been designated as National High Blood Pressure Month. Dr. T. D. Lampton of Jackson is chairman of the Mississippi committee which is coordinating the Mississippi Heart Association-sponsored activities.

The 1979 theme, "High Blood Pressure . . . Treat It for Life," emphasizes the committee's objective — to alert patients to the need to stay on treatment to control high blood pressure. Statistics show that many patients discontinue treatment for various reasons. Physicians are urged to continue their efforts to educate patients in the correct use of high blood pressure medication.

During High Blood Pressure Month, a state-wide communications project will seek to inform citizens about the dangers of hypertension and the need for treatment. Screening and referral programs will be intensified. The heart association's speakers bureau will emphasize the project, and educational materials will be made available.

MSMA, along with numerous other health-related and educational organizations, is participating in the communications effort. For more information, or to receive educational materials, write to Mississippi Heart Association, 4830 East McWillie Circle, Jackson 39206.

Auxiliary Plants Trees At UMC



Central Medical Auxiliary presented two wild honeysuckle trees to the University of Mississippi Medical Center in honor of National Doctor's Day March 30. The trees were planted in the patients' garden. On hand were, from left, Mrs. S. H. McDonnieal, Central Medical Auxiliary president; Mrs. Glenn F. Morris, Doctor's Day co-chairman; William T. Newell, University Hospital director; Mrs. G. V. Smith, Doctor's Day co-chairman; and Mrs. Bernard Patrick, auxiliary president-elect.

POSTGRADUATE CALENDAR

June 27, 1979

OFFICE MANAGEMENT OF HYPERTENSION
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine and the Medical Center Division of Continuing Health Professional Education, with support from a grant by the Pennwalt Pharmaceutical Division.

Coordinator: Herbert G. Langford, M.D., professor of medicine and chief of the endocrine and hypertension division, University of Mississippi School of Medicine.

The course will offer concise, clinically-oriented information on current concepts of office management of the hypertensive patient. Fee and credits to be announced.

All continuing education correspondence should be addressed to: Continuing Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

Alcohol Treatment Center Opens at Whitfield

Mississippi State Hospital at Whitfield last month opened its Alcohol Treatment Center, a separate facility which can house 50 patients at a time. Joseph V. Clay, Jr., M.D., is director of the unit.

The center will accept voluntary and Chancery Court commitments. Treatment will consist of detoxification and follow-up counseling during each patient's four week stay. Some patients will receive further after-care help from Alcoholics Anonymous, Friends of Alcoholics, Harbor House or Halfway House.

Counseling will be conducted by staff medical professionals and experienced counselors trained in the field of alcohol abuse and chemical dependence.

The center's \$121,000 in funding is provided by the drinking public via a three percent additional sales tax levied on distilled spirits and wines by the 1977 legislature. The money is deposited by the Alcoholic Beverage Control Division of the Mississippi Tax Commission to a special fund earmarked for use by the Division of Alcohol and Drug Abuse for alcohol treatment and rehabilitation.

Free Kits to Help Smokers Quit Are Available

A recent study indicates that many smokers would try to quit if their physicians told them to. However, about two-thirds of smokers report that they have never received advice from their physicians on quitting. To help physicians encourage their patients to stop smoking, the National Cancer Institute has developed the "Helping Smokers Quit" kit. Available free of charge, the kit contains enough materials to assist fifty smokers who want to quit.

Over 25,000 kits have been ordered by interested health professionals, according to a National Cancer Institute spokesman. Testing of the kit by the Harris County Medical Society in Houston, TX, indicated that the kit was useful.

"Cigarette smoking remains the single greatest preventable cause of death and disability in the U. S. today," says an NCI report. In 1977, smoking was a major factor in an estimated 220,000 deaths from heart disease; 78,000 lung cancer deaths; and 22,000 deaths from other cancers, including cancers of the mouth, esophagus, pancreas, kidney, and bladder. Forty per cent of all cancers in males, and a rapidly increasing percentage in females, are caused by smoking. Eighty-five per cent of deaths from bronchitis, emphysema and other lung diseases could be prevented if people stopped smoking, the National Cancer Institute estimates.

For more information, or to order kits, write to Bernard Ellis, Office of Cancer Communications, National Cancer Institute, Building 31, Room 4B39, Bethesda, MD 20014.

National Hospital Week Is This Month

The week of May 6-12, 1979, has been designated as National Hospital Week. This year's theme is "The Voluntary Effort — It's Working for You."

Public information activities will place emphasis on the recent voluntary strides made by hospitals to deliver cost-effective care in the best interest of the American people. Hospitals will seek to demonstrate how patients and the community can best utilize hospital services to get the most efficient care from an economic standpoint. Efforts will be made to make hospital employees aware of the importance of their roles in reducing the cost of health care.

First Jaquith Award Is Presented



Dr. Frank Covington, right, clinical director of the Central Mississippi Mental Health Center, received the first William Jaquith Award presented by the University of Mississippi Medical Center Department of Psychiatry. Dr. Edgar Draper, department chairman, made the presentation during informal ceremonies at the Medical Center. The award, named in honor of the state director of mental health, goes to the psychiatry resident who shows the greatest promise during postgraduate training. Dr. Covington completed his psychiatry residency in June 1978.

UMC Commencement is Slated for May

Some 335 University of Mississippi Medical Center students expect to receive degrees in Commencement ceremonies May 27 at the Jackson city auditorium.

Included in that number are 143 students who are candidates for the M.D. degree, and 21 students who expect to receive the first dental degrees to be awarded in Mississippi.

Speaker for the ceremonies will be Dr. Joseph F. Volker, Chancellor of the University of Alabama.

Degree candidates also include 83 for the B.S. in nursing, 31 for the master of nursing, 20 for the B.S. in physical therapy, 10 for the B.S. in medical record administration, four for the B.S. in medical technology, nine for the B.S. in nurse anesthesiology, two for the Ph.D. in the health sciences and one each for the master of combined sciences and the master of science.

Riverside.

Mississippi's Unique Psychiatric Hospital.

Riverside Hospital is unique in Mississippi.

As a privately owned 56-bed short term care facility for treating patients with psychiatric illness or emotional problems, it is the only hospital of its kind in the state.

Architecturally designed to create an attractive open environment, Riverside's "non-institutional" atmosphere helps prepare the patient for specific therapy, healthy entertainment and physical recreation.

The clinical program incorporates a wide range of modern psychiatric ideas. Emphasis is placed on interpersonal relationships, small group functions, and professional individualized care.

The Medical Staff includes a large number of physicians in private practice in the Jackson area. All are qualified and limit their practice to psychiatry.

Riverside is licensed by the Mississippi Commission on Hospital Care, and fully accredited by the Joint Commission on Accreditation of Hospitals.

For additional information contact: John R. Reedy, Executive Director.

Riverside Hospital

P.O. Box 4297, Jackson, MS 39216
Telephone: (601) 939-9030



State Has Funds For Sickle Cell Patients

In 1978 the Mississippi Legislature increased the amount of appropriations to the State Board of Health's Crippled Children's Services by \$66,000 in order to give financial aid to patients afflicted with sickle cell disease.

Through this program, diagnostic screening for the detection of sickle cell anemia is available to children under the age of 21. The program will also pay for emergency room visits, hospitalization, clinic fees and physician fees as needed for the treatment of the disease.

Applications for this program are available in every county health department, welfare office, and the social work division in hospitals throughout the state.

According to Wayne Early, supervisor of the program, his office has records of at least 115 people in the state who have sickle cell anemia. Although all of these people have been notified that this financial assistance is available, only 15 people have applied for the program.

"Since this program went into effect last July, we have only spent about 10% of the available funds," said Early. "I am certain that there are more than 15 people in the state who need our help. We just seem to be having a hard time getting the word out."

For more information about this program, contact Wayne Early, Crippled Children's Services, P.O. Box 1700, Jackson, MS 39205. Telephone 982-6571.

Research Grants Offered By Leukemia Society

The Leukemia Society of America is accepting applications for grants to support research in the fields of leukemia and related disorders. As a source of funding for individual investigators whose work is concentrated on uncovering the cause or cure for leukemia, the lymphomas and Hodgkin's disease, the national voluntary agency offers three types of grants, intended to encourage studies at both the basic science and clinical levels.

Deadline for filing applications is Sept. 1, 1979. Application forms and further information may be obtained by writing Dr. Kenneth McCredie, Vice President for Medical and Scientific Affairs, Leukemia Society of America, Inc., 211 East 43 St., New York, NY 10017.

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Optometrists Push Legislation

Bills that would permit optometrists to use certain drugs in diagnosing conditions of the human eye have been introduced this year in the following 20 states: Arkansas, Massachusetts, Georgia, Nebraska, Utah, Virginia, Alaska, South Dakota, North Dakota, Iowa, Hawaii, Connecticut, Ohio, Arizona, Tennessee, Oklahoma, New York, Vermont, New Hampshire and Colorado.

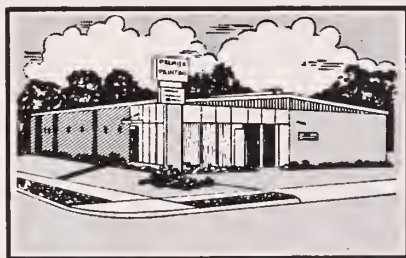
Legislation has been enacted thus far in Nebraska, Utah, North Dakota and South Dakota, bringing to 20 the number of states that have enacted such legislation in the past few years. Virginia legislation was vetoed for the second consecutive year.

The Arkansas bill has passed both houses of the legislature and is awaiting resolution of assembly and senate differences before being sent to the Governor.

Bills in Iowa, Arizona and Oklahoma have passed one house of the legislature and a bill in West Virginia would repeal that state's statute permitting use of drugs by optometrists for treatment as well as diagnosis of eye conditions.

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Tenuate®
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in the evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg tablet daily, swallowed whole, in the morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976
MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.
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Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.

Cayey, Puerto Rico 00633

Direct Medical Inquiries to:

MERRELL-NATIONAL LABORATORIES

Division of Richardson-Merrell Inc.

Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

**Whether overweight is a
complicating factor...
or just uncomplicated overweight.**

Tenuate[®] Dospan[®] ^{IV} **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.
And it's responsible medicine.**

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For prescribing information see opposite page

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J-6999-4

April 1979

In Edema* or Hypertension* when
potassium balance is a concern...

Potassium-Sparing DYAZIDE®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene)
and 25 mg. of hydrochlorothiazide.

Makes Sense

In Edema

The triamterene in 'Dyazide' limits potassium loss and provides an additive diuretic effect to that of the hydrochlorothiazide component.

In Hypertension

As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the triamterene component limits potassium loss.

Serum K⁺ and BUN should be checked periodically

particularly in the elderly, diabetics, and those with suspected or confirmed renal insufficiency (see Warnings). If hyperkalemia develops, substitute a thiazide alone.

Before prescribing, see complete prescribing
information in SK&F Co. literature or PDR. A
brief summary follows:

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Anti-hypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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EMPIRIN[®] COMPOUND c CODEINE

Each tablet contains aspirin, 227 mg; phenacetin, 162 mg; and caffeine, 32 mg; plus codeine phosphate in one of the following strengths: #4—60 mg (gr 1); #3—30 mg (gr ½); #2—15 mg (gr ¼); and #1—7.5 mg (gr ⅛). (Warning—may be habit-forming)



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Pennsylvania Settlement Is Approved

Federal Judge John P. Fullam of Philadelphia, Pennsylvania, approved on April 16, 1979, the terms of the partial settlement agreement in the Pennsylvania chiropractic litigation. Under the terms of the settlement, it will become effective in thirty days if notice of appeal is not filed by any party.

This will dismiss from the case the AMA, the Pennsylvania Medical Society, the American Hospital Association, the Hospital Association of Pennsylvania, the Joint Commission on Accreditation of Hospitals, the Pennsylvania Association of Pathologists and North Penn Hospital.

The settlement agreement as endorsed in December by the AMA House of Delegates affirms that each physician member may decide for himself or herself whether to accept or decline a patient sent by a licensed, limited practitioner. The AMA is not bound by the terms of the settlement as to any other settling defendant.

The AMA position on chiropractic continues to affirm the fact that there have been no developments since 1966 that would provide scientific support for the utilization of spinal manipulation as appropriate treatment for ailments such as hypertension, heart disease, stroke, cancer, diabetes and infections.

Further, the settlement of the Pennsylvania case does not prevent the AMA or other defendants from expressing their views on chiropractic.

The settlement is described by Judge Fullam as partial because the American College of Radiology and the Pennsylvania Society of Radiologists remain defendants, having not signed or agreed to any terms for settlement of the case.

AMA Charges FTC With Prejudice

The American Medical Association has charged Michael Pertschuk, Chairman of the Federal Trade Commission, with "forsaking his responsibility of ultimately determining the merits of the charges against the AMA and (choosing) instead to pursue the role of advocate."

The Association's attorneys moved that Chairman Pertschuk withdraw or be disqualified from any further participation in the challenge by the FTC to the position of the AMA on advertising by physicians. The Commission is currently hearing an appeal by the AMA against a ruling by FTC Administrative Judge Ernest Barnes that the association's views on physician advertising are in violation of the Federal Trade Commission Act.

James H. Sammons, M.D., AMA Executive Vice President, said: "We are aware of the seriousness of our motion. But it has become obvious that Mr. Pertschuk has prejudged the case against the AMA, and has already decided that the Commission's actions against the AMA would keep health care costs down, raise quality and broaden consumer choice. We feel that such a conclusion is not only premature but contrary to evidence which we have presented."

Medicare Payments Are Limited

The Health Care Financing Administration (HCFA) has issued final regulations which limit Medicare payment for services, which are determined not to be medically necessary or for custodial care services, to one day after the day the beneficiary or provider of services received notice that the services in question were excluded from Medicare reimbursement. The old rule permitted payment for up to three days. In announcing the new rule, HCFA stated, "The primary effect of this change will be to prevent payment for more than one day in those situations where additional time is not needed to arrange for post-discharge care."

A provision in the recently enacted Medicare-Medicaid Antifraud and Abuse Amendments (PL 95-142) limits payment for inpatient hospital or post-hospital extended care services disapproved by a PSRO to one day after the day the provider receives notice of the disapproval. Payment may be continued for up to two additional days, for a total of three days, only when the PSRO determines that more time is required to arrange for the beneficiary's post-discharge care.

AMA ANNUAL MEETING
July 21-25, 1979
Chicago

IN CONCLUSION

A technological research corporation estimates that 81,000 coronary bypass operations will be performed in the U.S. this year, up from 72,000 in 1978. They also estimate that the worldwide population of hemodialysis patients will grow from 110,000 in 1977 to 173,000 in 1981. Increased use of ultrasound equipment will produce sales in excess of \$200 million by 1982, with diagnostic applications accounting for 88% of that amount.

Allergies are the nation's number one cause of chronic illness. There are about 35 million Americans who have one or more allergic diseases, and each year the number is increasing. Of these, 9 million suffer from asthma (with an estimated 2,000 - 4,000 deaths attributed to asthma annually) and 14 million have hay fever. A newsletter from the American Academy of Allergy reports that research continues to examine the allergic potential of occupational substances.

Roche Laboratories has embarked on a \$1 million-plus multimedia campaign to ensure the safe use of drugs, with special emphasis on the dangers of mixing alcohol with some medications. Advertisements will appear on television and in national publications. Since studies have shown that mixing alcohol and drugs is a problem among the elderly, Roche has printed 21 million booklets for distribution to the elderly via their physicians and pharmacists.

A simpler food information system could increase the use of nutrition labeling, making it easier for patients to comply with prescribed dietary regimens, the AMA has told the Subcommittee on Nutrition of the Senate Committee on Agriculture. The current system, calling for exact figures, requires repeated and very refined analytical tests. Permitting food processors to use average nutritional values would reduce expense and increase voluntary labeling, AMA believes.

Patients using household teaspoons to administer medicine are exposing themselves to the danger of toxic overdosage or serious underdosage, since the medically defined "teaspoon" is 5 cc, but household teaspoons have been found to vary from 2 cc to 9 cc -- a 450% variance. The study, conducted by the University of Michigan College of Pharmacy, reports that problems can develop when there is a difference of 10% in dosage with many medications.

For recurrent attacks of urinary tract infection in women

Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
20	9	1 teasp. (5 ml)	½ tablet
40	18	2 teasp. (10 ml)	1 tablet
60	27	3 teasp. (15 ml)	1½ tablets
80	36	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	½ the usual regimen
Below 15	Use not recommended

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Please see back cover.

Her next attack of cystitis may require

the Bactrim™

3-system counterattack



ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has no significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

June 1979

BALCONY

Journal of the
State Medical
Association

Mississippi

(ISSN 0026-6396)

Contents:

Analgesic
Nephropathy

Clinical Osmometry in
Patients Having an
Impaired Sensorium or
in Coma

Annual Session
Highlights



PERFORMANCE. PROVEN EFFECTIVENESS WITHIN A WIDE SAFETY MARGIN.



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And, of course, the specific calming action of Librium has been demonstrated in millions of patients around the world. In a large number of these patients, Librium was used concomitantly with other primary medications.

Proven performance within a wide safety margin. Basically, that's what Librium is all about.

LIBRIUM® chlordiazepoxide HCl/Roche THE ANXIETY-SPECIFIC

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.*

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malforma-

tions as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



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Up to 50% less expensive than ready-to-serve formulas.

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Soyalac is the only leading milk-free infant formula available as an inexpensive powder. It provides exactly the same nutritional balance as Soyolac's con-

centrated and ready-to-serve infant soy formulas — at a fraction of the cost.

Your patients who use formula will appreciate knowing about it.

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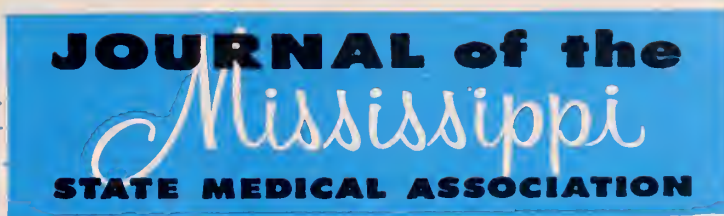
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June 1979



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Califano Requests New Fraud Powers

Secretary of HEW, Joseph A. Califano, Jr., has asked congress for power to bypass the courts and impose a civil penalty of \$2,000 on physicians and other providers for each fraudulent claim under Medicare and Medicaid.

In addition to the fine, Califano also asked that he be allowed to assess damages equal to twice the amount of fraud.

The legislation would permit Califano to impose the penalty after a departmental hearing. The penalty could be appealed to the courts.

Senate Passes Health Planning Amendments

The Senate has passed S 544, the "Health Planning Amendments of 1979." House action has not been taken.

This bill is similar to the bill which passed the Senate last July during the 95th Congress. A major change in the bill from last year's proposal relates to the prior bill's extension of certificate-of-need requirement to all medical equipment valued at more than \$150,000. The bill provides an exemption of major medical equipment from health planning certificate-of-need requirements if the equipment is not to be owned or located in a health care facility, and extends authorities for national health planning and development for three years.

Other provisions of S 544 would require state certificate-of-need programs to exempt (from a CON requirement) the establishment of HMO ambulatory facilities and change Health Systems Agencies' (HSAs) provisions to require HSA staff to be assigned to consumer board members, to require an open selection process for HSA membership, to require consumer majorities on HSA subcommittees, to provide advance payments for HSA members' expenses, and to improve liability protection for HSA members.

Other changes seek to improve coordination between health planning entities and appropriate drug abuse, alcohol abuse, mental health and rate review agencies and to emphasize the maintenance and improvement of competition in the health industry in the health planning process.

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Tenuate Dospan[®]
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. Onset or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdose. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride) One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdose include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine[®]) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdose.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
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Direct Medical Inquiries to

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

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complicating factor...
or just uncomplicated overweight.**

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A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

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April 1979

Court Says Records Not Subject to Disclosure

Records of a hospital review committee were not subject to disclosure in a malpractice suit against a hospital for allegedly negligent supervision and retention of a physician, the Colorado Supreme Court has ruled.

A patient filed suit against the hospital and the physician claiming that he negligently performed neurosurgery on him in the summer of 1975. He also named the hospital as a party, contending that it was negligent in appointing, supervising and retaining the physician on its staff.

In August 1975, the hospital suspended the physician's admitting privileges pending an investigation of his treatment of the patient. An ad hoc committee of four staff physicians was created to review the physician's treatment. The committee met twice and then recommended that the physician be summarily suspended pending further investigation. On November 1, 1975, the medical advisory board met and suspended the physician.

The patient sought to take the depositions of members of the ad hoc committee. The hospital filed a motion for a protective order and to quash the subpoenas. A trial court quashed the subpoenas on the ground that the workings of the review committee were privileged.

On appeal, the Supreme Court affirmed the ruling. The court broadly construed a Colorado statute making the records of a review committee not subject to subpoena in a civil suit against a physician to apply in the suit against both the hospital and the physician. The legislature clearly intended that hospital review committees be allowed to act unfettered by fear of subsequent liability, the court said.

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Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies

before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin.

(102175)

***Equivalent to penicillin V.**

Additional information available to the profession on request.



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NEWSLETTER

June 1979

Dear Doctor:

Despite interest and concern, few Americans regularly practice good health habits, a new national survey shows. General Mills commissioned the survey in an effort to provide insights into health attitudes and behavior of American families and to suggest ways in which their health can be improved. Topics studied were the impact of inflation, personal values and how they influence health attitudes, preventive versus crisis health care, and levels of information about health practices.

Pressures of inflation are forcing half of American families to cut back on health-related items such as: buying high quality food and serving meat, fresh fruits and vegetables daily; getting checkups at doctor or dentist offices; having dental work done; getting eyes checked and/or buying new eyeglasses. Preventive health measures receive low priority.

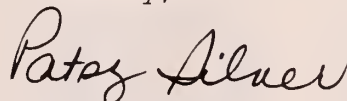
Most Americans have confidence in their doctors, but 75% think doctors' fees have risen more than other things; 73% feel checkups cost too much for the average family. The vast majority (82%) feel the need for less stress in their lives. While almost all express difficulty coping with increasing costs, severe time constraints, family problems and crime, only 60% would see a psychiatrist-as a last resort.

Doctors are generally regarded as the best source of health information, but only one in four families feels well-informed about good health practices. An equal number claim to be poorly informed, despite the availability of information. Seventy-six percent state that all the government warnings and regulations are confusing; yet most feel government should do more to protect them from potentially unsafe products.

Other findings show that 67% do not recognize alcoholism as a health problem, but a personal weakness; over half of all adult family members mention cancer as their principal health worry, followed by accidents and heart trouble; more than one fourth of all parents and 44% of minority group family members believe that it is the government's responsibility - rather than the parents' - to see that children are immunized.

The report shows that a majority (60%) of American families today are ready to accept a more active approach to health care; however, only a minority of American family members appear to be taking meaningful action in this direction. Self initiative to achieve better health is favored, but there is a lack of commitment, "pointing to the need for greater information, guidance and motivation," summarizes a spokesman.

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Patsy Silver
Managing Editor

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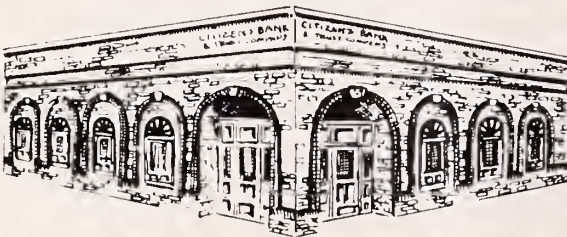
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New Form of Drug Abuse Is Reported

Ingestion of Jimson ("loco") weed, an increasingly popular form of drug abuse among adolescents, can result in death or serious illness, according to a group of researchers from William Beaumont Army Medical Center in El Paso, TX. The group's report appeared in the April issue of *Pediatrics*, the monthly scientific journal of the American Academy of Pediatrics.

Of the 29 patients, ages 13 to 21, admitted to William Beaumont Army Medical center with diagnoses of intentional ingestion of the plant Jimson weed, all were said to have some or all of the following symptoms: visual and auditory hallucinations; disorientation with respect to time, place or person; combative behavior; accelerated heart rate; elevated blood pressure; above normal temperature; and urinary retention requiring catheterization.

The researchers cited other reports in which patients were hospitalized with severe neurologic derangement, and altered liver function.

"Hospitalization in cases of ingestion of Jimson weed is necessary," said the physicians, "because an altered mental state may persist for several days, and failure to recognize this condition may result in tragedy. Patients have wandered into the desert and died of exposure, or drowned while swimming in a pond."

According to the group, the main drug contained in the Jimson plant is atropine, which when ingested in significant amounts eventually can lead to delirium and coma.

The researchers noted that the plant, *D stramonium*, is known by a variety of names: Jimson weed, devil's weed, devil's apple, stinkweed, malpitte, thornapple, green dragon, and loco weed.

They explained that the seeds, leaves, roots, flowers, and stems of Jimson weed all contain the belladonna alkaloids, atropine and scopolamine, with the seed being the most potent. It was noted that the plant flowers from May to September, and that the fruit pod, which is covered with spikes and contains 50 to 100 brown-black seeds, appears in the fall.


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INDICATIONS: *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the

ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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The tranquilizer component alleviates symptoms of anxiety and agitation within a few days, without apparent dulling of mental acuity. Hypnotic effects from the tranquilizer component appear to be minimal, particularly in patients permitted to remain active. However, TRIAVIL may impair mental and/or physical abilities required for the performance of hazardous tasks.

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For optimal flexibility there are now *five* tablet strengths of TRIAVIL for ease of dosage adjustment. For initial management of patients with moderate anxiety and depression, one TRIAVIL[®] 2-25, containing 2 mg perphenazine and 25 mg amitriptyline HCl, t.i.d. may often be adequate. TRIAVIL[®] 4-50, containing 4 mg perphenazine and 50 mg amitriptyline HCl, provides b.i.d. convenience for those patients needing the larger total daily dose of 8 mg perphenazine and 100 mg amitriptyline HCl as initial or maintenance therapy.

Treatment with TRIAVIL—a balanced view:

TRIAVIL is contraindicated in CNS depression from drugs, in the presence of evidence of bone marrow depression, and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. TRIAVIL may impair mental and/or physical abilities required for performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to overdosage of other drugs or mask other disorders. The possibility of suicide in depressed patients remains until significant remission occurs. Such patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

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*Please see following page
for a brief summary
of prescribing information.*

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4 mg perphenazine and 50 mg amitriptyline HCl.
TRIAVIL® 4-25: Each tablet contains
4 mg perphenazine and 25 mg amitriptyline HCl.
TRIAVIL® 4-10: Each tablet contains
4 mg perphenazine and 10 mg amitriptyline HCl.

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); evidence of bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Should not be given concomitantly with a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. When used to replace a monoamine oxidase inhibitor, allow a minimum of 14 days to elapse before initiating therapy with TRIAVIL. Therapy should then be initiated cautiously with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given concomitantly with guanethidine or similarly acting compounds since TRIAVIL may block the antihypertensive action of such compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. Dosage of anticonvulsive agents may have to be increased. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time, particularly in high doses. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. In patients who use alcohol excessively, potentiation may increase the danger inherent in any suicide attempt or overdosage. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of some untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides. There is sufficient experimental evidence to conclude that chronic administration of antipsychotic drugs which increase prolactin secretion has the potential to induce mammary neoplasms in rodents under the appropriate conditions. There are recognized differences in the physiological role of prolactin between rodents and humans. Since there are, at present, no adequate epidemiological studies, the relevance to human mammary cancer risk from prolonged exposure to perphenazine and other antipsychotic drugs is not known.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone. **Perphenazine:** Extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) have been reported and can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw. Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. Fine vermicular movements of the tongue may be an early sign of the syndrome. The full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; other adverse reactions reported with various phenothiazine compounds, but not with perphenazine, include grand mal convulsions, cerebral edema, polyphagia, pigmentary retinopathy, photophobia, skin pigmentation, and failure of ejaculation.

The phenothiazine compounds have produced blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); and liver damage (jaundice, biliary stasis).

Pigmentation of the cornea and lens has been reported to occur after long-term administration of some phenothiazines. Although it has not been reported in patients receiving TRIAVIL, the possibility that it might occur should be considered.

Hypnotic effects, lassitude, muscle weakness, and mild insomnia have also been reported.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have been noted with other pharmacologically similar tricyclic antidepressant drugs and must be considered when amitriptyline is administered. **Cardiovascular:** Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. **CNS and Neuromuscular:** Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Anticholinergic:** Dry mouth; blurred vision, disturbance of accommodation; increased intraocular pressure; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. **Allergic:** Skin rash; urticaria, photosensitization, edema of face and tongue. **Hematologic:** Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. **Gastrointestinal:** Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea, parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). **Endocrine:** Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. **Other:** Dizziness, weakness; fatigue; headache; weight gain or loss; increased perspiration, urinary frequency; mydriasis; drowsiness; alopecia. **Withdrawal Symptoms:** Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1-3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

J8TR31 (DC6613215)

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Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg, bismuth subgallate, 22.5 mg, bismuth resorcin compound, 17.5 mg, benzyl benzoate, 12.0 mg, Peruvian balsam, 18.0 mg, zinc oxide, 110.0 mg, also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani. Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol[®] Suppositories or Ointment.

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Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precutions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Caution should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults. Remove foil wrapper and insert suppository into the anus. One suppository in the morning

and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults. After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24), in silver foil strips with Anusol-HC W C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01), with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F).

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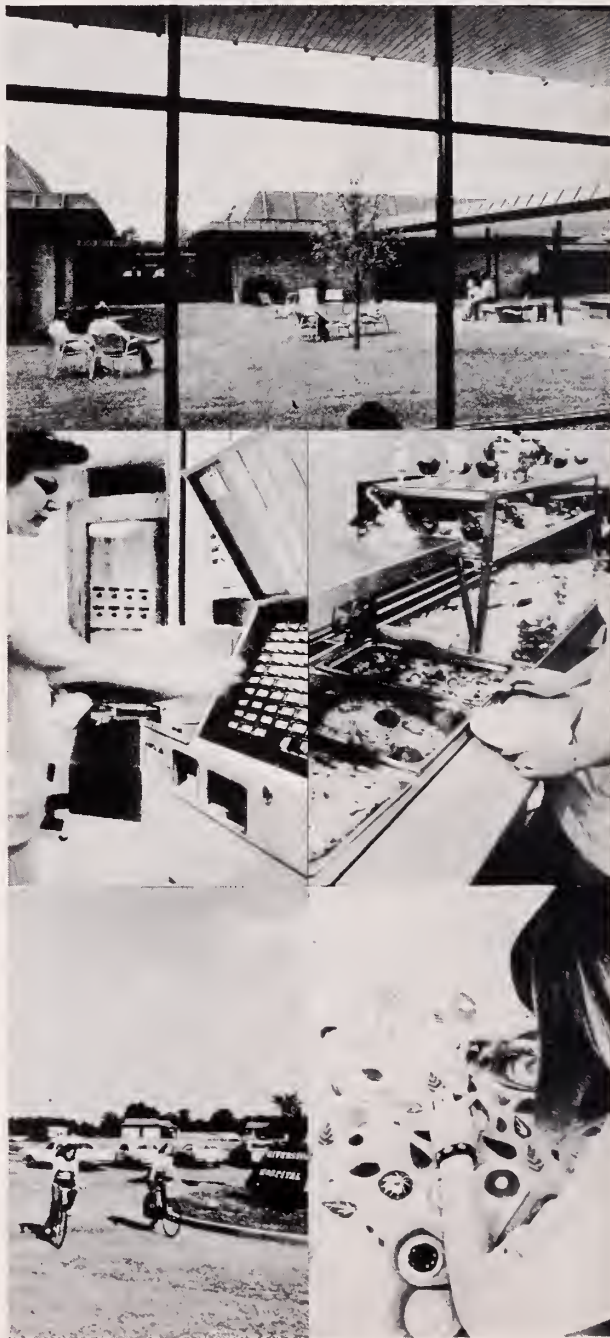
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DATELINE

UMC Grads Remain In State Jackson, MS - Since 1957, 1667 physicians have earned the M.D. degree at UMC and 67.4% are practicing in Mississippi. This medical school retention rate is better than the most recently reported national rate, 50.2%. Of the total physician population in the state, 29% are graduates of the UMC School of Medicine. Current estimates by the State Board of Health indicate that there are 2500 physicians in the state, an increase of 72.5% in the years since UMC was opened.

State Needs Family Physicians Vicksburg, MS - Mississippi is producing only 12 Family Physicians per year, stated Dr. W. R. Gillis of University Medical Center, in a recent speech. There were 112,000 general practitioners in the U.S. in 1931, but by 1969 the number had dropped to 53,997. Family Medicine is emerging as a discipline in medical schools, however, because of the recognition of need. Mississippi needs 200 family physicians by 1980, he said.

Children Suffer Most Poisonings Jackson, MS - Eighty percent of all accidental poisonings occur in children under five. Much of this problem could be eliminated, says a spokesman for the UMC poison services department, by "poison proofing" the home. Physicians are advised that their patients may receive a free brochure on "poison proofing" by writing Poison Services, Department of Pharmacology and Toxicology, University of Mississippi Medical Center, 2500 North State St., Jackson, MS 39216.

Eastern Hospitals Controlling Costs Baltimore, MD - New York State and Maryland hospitals had the lowest rates of increase in hospital costs of the 50 states, according to figures released by the American Hospital Association and reported in the Maryland State Medical Journal. Statistics for 1977 indicate that New York's rate of increase was 8.6%, and Maryland's was 9.3%, compared to the national average rate of increase, 13.9%. Maryland hospital officials, estimating the savings at \$48 million, expect the trend to continue.

HEW Notices Payment Errors Washington, DC - In March, the Department of HEW set new rules to reduce state payment errors in the Aid to Families with Dependent Children, Medicaid, and Supplemental Security Income programs. Since then six states - Illinois, Massachusetts, Michigan, New York, Ohio and Pennsylvania - have developed action plans. These states made 44% of the nation's AFDC expenditures, and accounted for 61% of erroneous payments. Washington, DC had a payment error rate of 20.1; Mississippi's rate was 9.3.

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As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the triamterene component limits potassium loss.

Serum K⁺ and BUN should be checked periodically

particularly in the elderly, diabetics, and those with suspected or confirmed renal insufficiency (see Warnings). If hyperkalemia develops, substitute a thiazide alone.

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Anti-hypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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...in the functional bowel/irritable bowel syndrome*

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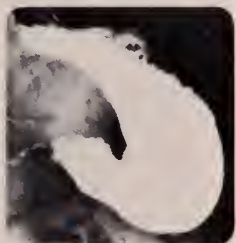
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helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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(dicyclomine hydrochloride USP)

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Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **AVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention; blurred vision and tachycardia, palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea, vomiting, impotence, suppression of lactation, constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis, urticaria and other dermal manifestations, some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: **Adults:** 1 or 2 capsules or teaspoonfuls syrup three or four times daily. **Children:** 1 capsule or teaspoonful syrup three or four times daily. **Infants:** ½ teaspoonful syrup three or four times daily (May be diluted with equal volume of water.) Bentyl 20 mg. **Adults:** 1 tablet three or four times daily. Bentyl Injection: **Adults:** 2 ml. (20mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Uracholine[®] (bethanechol chloride USP) should be used.

Product Information as of October, 1978

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Ocaturo, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Mental Health Legislation Is Enacted

The 1979 Mississippi Legislature passed a number of alcohol and drug related bills of interest to the medical profession.

Senate Bill 2264 extended the three percent sales tax on alcoholic beverages to fund alcohol treatment and rehabilitation programs.

House Bill 723 placed an assessment of \$5.00 on persons violating the Mississippi Implied Consent Law (DWI) to fund driver safety programs.

House Bill 186, which becomes effective on July 1, 1979, allows physicians to treat minors over 15 years of age for mental and emotional problems caused by alcohol and drugs without parental consent. It also releases the parent, guardian or spouse from financial liability for the treatment.

AMA Annual Meeting Set in Chicago

The annual meeting of the House of Delegates of the American Medical Association will be held July 22-26 in Chicago, at the Downtown Chicago Marriott Hotel.

The 274 members of the House of Delegates represent each of the states, plus the Canal Zone, District of Columbia, Guam, Puerto Rico, Virgin Islands, national medical specialty societies, resident physicians, medical students, medical schools, the medical corps of the Army, Navy and Air Force, Public Health Service and Veterans Administration.

The July annual meeting will consist only of House of Delegates sessions. The traditional scientific program of postgraduate courses, lectures, symposia, exhibits and other events will be presented at the AMA Winter Scientific Meeting in San Antonio, TX, Jan. 12-15, 1980. The annual convention of 1978 at St. Louis was the last to combine a meeting of the House of Delegates and the Scientific Program.

Hoyt D. Gardner, M.D., Louisville, KY, will be inaugurated as president of the AMA, succeeding Tom E. Nesbitt, M.D., of Nashville, TN.

The House of Delegates is the AMA's policy-making body. Its resolutions and deliberations set the pattern for the association's operations throughout the year. The House meets twice annually, in the summer and in mid-winter.

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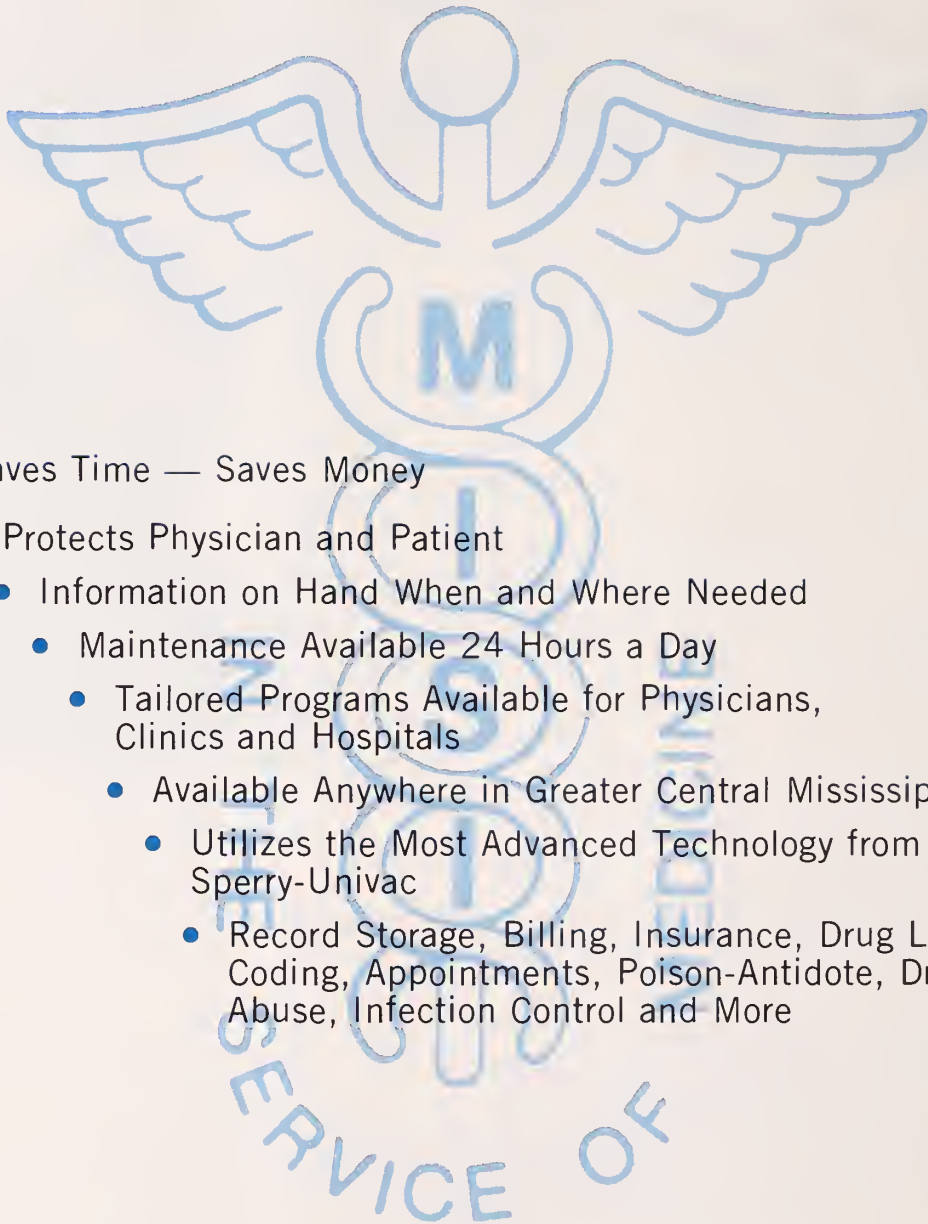


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ORIGINAL PAPERS

Analgesic Nephropathy

JAIRO BARONA-Q., M.D., and JOHN D. BOWER, M.D.

Jackson, Mississippi

ANALGESIC NEPHROPATHY is classified as one of the disease entities that affects primarily the renal tubules and interstitial tissue. This is therefore classified as tubulo-interstitial nephropathy.¹

Analgesic nephropathy is an important cause of chronic nephropathy and end stage renal disease. This is particularly true in Australia,² Canada,³ Britain,⁴ Switzerland,⁵ and Scandinavia,⁶ countries where this entity accounts for anywhere from 4.8% to 25.5% of all patients with end stage renal disease. This is also true but to a lesser extent, in this country.⁷

The original description of an association between analgesic abuse and renal disease is attributed to Spühler and Zollinger from an autopsy series published in 1953. Clinical observations and animal experimentation subsequently have resulted in an increased awareness of this association. Because phenacetin was the compound most frequently identified in chronic analgesic users with renal impairment, this entity was initially called "phenacetin nephropathy." It is now known that many other analgesics can produce renal damage. This list definitely includes acetaminophen, propoxyphene, phenacetin, and aspirin.⁹ Acetaminophen constitutes one of the main ingredients of commercially available preparations like Excedrin®, Vanquish®, Darvon Compound®, Empirin®, Fiorinal®, Norgescic®, SK-65®, and Percodan®. Experimentally, it has been well demonstrated that analgesic combinations containing aspirin and phenacetin actually potentiate

each other and result in more severe renal damage than when either component is taken alone.¹⁰ However, there still is a great deal of controversy as to the

Analgesic nephropathy is an important cause of chronic nephropathy and end stage renal disease in some countries. Figures showing the prevalence in this country are not yet available. Elements of the disease are discussed, and two case reports are presented. The authors note that diagnosis is sometimes difficult, since patients deny drug abuse, but once diagnosis is made, progression of the renal lesion can be stopped and renal function can be improved with discontinuation of analgesics.

amount, frequency and duration of dosage, which results in permanent and definite renal damage.⁹ It has been estimated that for phenacetin, the minimal dose required to cause damage to the kidney is one gram or six tablets per day for one to three years.

A factor considered to play a role in the pathogenesis of analgesic nephropathy includes the ability of noxious metabolites of these compounds to undergo preferential concentration in the medullary portions of the kidney. These toxic effects can be accentuated by dehydration and minimized by forced hydration. Due to this physiological concentrating effect, intratubular and interstitial precipitation of these compounds can occur.¹¹ This apparently produces a local toxic reaction that causes the pathological lesions seen in medullary portions of the kidney.

From the Department of Medicine, University of Mississippi Medical Center, Jackson, MS.

Additionally, it has been demonstrated that medullary ischemia plays a role in rats fed aspirin and phenacetin.¹² Pathologically, the major changes are confined to the renal medulla.¹³ The more distal papillary areas undergo necrosis which eventually results in sloughing off of portions of the papillae. Glomerular changes are seen only in those nephrons with tubules that penetrate the necrotic papillae. These changes consist of hyalinization to a varying degree associated with periglomerular fibrosis and eventually, atrophy. These glomerular changes are felt to be secondary to obliterative tubular changes. An association between excessive analgesic ingestion and transitional cell carcinoma of the renal pelvis, ureter and bladder has also been established.¹⁴ The presence of persistent microscopic hematuria should prompt the investigation of this latter possibility.

Clinical Features

This disease is most prevalent in females, with a ratio of approximately six females to one male. The highest incidence peaks in the fifth decade. The clinical features include dyspepsia with peptic ulceration in one-third to one-half of the patients. The majority complain of pain, especially headaches and arthritis. Many of these patients receive, have received, or are felt to need psychiatric treatment. Controlled psychosocial studies¹⁴ have shown a higher incidence of addiction for drugs like hypnotics, sedatives, tranquilizers, pain pills, purgatives and alcohol. Personality disturbances are usually of the neurotic type with depression and anxiety associated with multiple somatic complaints. Denial of analgesic consumption is almost universal, and frequently prevents early and accurate diagnosis.

Laboratory studies show an anemia that is usually out of proportion to the degree of renal impairment. This is due occasionally to hemolysis from an underlying glucose-6 phosphate dehydrogenase deficiency. Chronic gastrointestinal blood loss is also very common and can contribute to the anemia. The renal functional defects appearing early in the disease include an inability to concentrate and to acidify the urine. These defects produce a disproportionate systemic acidosis in the presence of fairly adequate renal function and a propensity to become extracellularly volume depleted upon modest restriction of fluid and salt. This preferential tubular disorder also accounts for such symptoms as nocturia, polyuria

and muscle cramps. Some patients develop distal renal tubular acidosis with stone formation. When the papillae necroses and sloughs off, the patient can present with renal colic, ureteral obstruction and gross hematuria. Obstruction may be insidious, with progressive deterioration of renal function. Proteinuria is usually mild (-1 gm/24 hrs.), and the urinary sediment reveals pyuria in the absence of bacteria or infection. This is called "sterile pyuria." By the time of diagnosis, the glomerular filtration rate is decreased in the majority of patients. On physical examination, hypertension is present in 15% to 50% of the patients at the time of diagnosis.

In order to diagnose this form of renal disease, a high index of suspicion must be maintained because the patient usually denies drug abuse. Increased suspicion may be obtained by intravenous and/or retrograde pyelography in most cases. Enhanced efforts at a diagnosis are of paramount importance due to the fact that progression of the renal lesions can be arrested, and improvement in renal function can even be accomplished if the use of analgesics is stopped.⁷

TABLE I

CLINICAL FEATURES IN 10 PATIENTS WITH ANALGESIC ASSOCIATED NEPHROPATHY AT THE TIME OF DIAGNOSIS

FEMALES/MALES	6/4
HISTORY OF CHRONIC PAIN	10/10
ANEMIA	10/10
DECREASED RENAL FUNCTION	10/10
PROTEINURIA:	
LESS THAN 3.5 gm/day	6/10
MORE THAN 3.5 gm/day	1/10
ABNORMAL IVP AND/OR	
RETROGRADE PYELOGRAM	7/10
POSITIVE URINE CULTURE	2/10
PYURIA	10/10
PAPILLARY NECROSIS	2/10

At the University of Mississippi Medical Center, a total of ten patients have been identified over the last six years to fulfill the criteria for diagnosis of analgesic associated nephropathy. The frequency of the different components of the clinical picture are shown in Table I.

Case Report

Mr. W.B. is a 47-year-old white male who first presented to the University Medical Center in April of 1972 with a one-year history of right costovertebral angle pain which persisted despite a right pyeloplasty for UP junction obstruction. He also gave a history of chronic severe headaches of five years' duration for which he took Darvon Compound two capsules every six hours around the clock. Past history revealed that he had Rocky Mountain Spotted Fever during World War II in Normandy, France; he had undergone several knee operations in 1964 and 1965, appendectomy in 1956, repair of an incisional hernia in 1956, and T and A in 1960.

Physical examination revealed a well developed, well nourished patient with a flat affect. There was a right subcostal incision and appendectomy scar; there was mild benign prostatic hypertrophy and increase in the size of the left knee with normal range of motion. The rest of the physical examination was unremarkable. The serum sodium was 140 mEq, the potassium 4.6 mEq, the chloride 103 mEq, and the carbon dioxide 23 mEq per liter. The blood urea nitrogen was 44 mg, the creatinine 4.2 mg, the albumin 3.2 mg, the phosphorus 4.7 mg, the calcium 9.9 mg, and the uric acid 9.6 mg%. The creatinine clearance uncorrected for surface area was 36 ml per minute. The hemoglobin was 10.8 gm per 100 ml, and the hematocrit was 31%. The urine sediment contained too numerous to count white blood cells with 20 to 50 red blood cells per high power field, and heavy bacteria. The urine culture and sensitivities revealed a heavy growth of *E. coli*.

A complete neurological examination for his headaches disclosed no abnormalities. The patient received Ampicillin for his urinary tract infection, and he was discharged home on a 50 gram high biological value protein diet, Basaljel and Ampicillin.

The patient was readmitted in August of 1972 with a seven day history of left flank colicky pain, gross hematuria with clots and fever. On physical examination he was afebrile, and mild costovertebral angle tenderness was elicited bilaterally. Urine culture and sensitivities again revealed heavy growth of *E. coli*, and his creatinine clearance had decreased to 10 mls per minute.

Cystoscopy and retrograde pyelograms were performed with the findings shown in Figure 1. The day after the retrograde pyelograms were performed, the patient passed a piece of tissue in the urine which was histologically found to be a necrotic renal papillae.



Figure 1. There is distention of the right renal pelvis. Left retrograde pyelogram shows typical radiological findings of total papillary necrosis.

This was followed the next day by passage of another piece of papillary tissue. The patient was again given another course of Ampicillin and sent home on the previous regimen. Over the ensuing months, the patient passed several "kidney stones." Despite concerted efforts on the part of his physician, the patient continued to take large amounts of analgesics, particularly Darvon Compound. His renal function deteriorated progressively, and in October 1976 the patient was started on a chronic hemodialysis program.

Case Report

Mrs. J.B. is a 60-year-old white female who was first seen at the University of Mississippi Medical Center in October 1977. Her history begins at age eight when she received a "clothes line" injury to the head that did not require stitches or any medical attention. Her headaches were reported to have begun at this time. At age twelve she had "blood poisoning" with an exacerbation of her headaches associated with this. At age sixteen she had

Analgesic Nephropathy / Barona, Bower

peritonitis from a ruptured appendix, from which she recovered without sequelae except that her headaches persisted almost daily. At that time, she began taking pain remedies of any and all types that were available over the counter; prior to that time she had taken sporadic analgesics given by her parents.

Fourteen years prior to the present admission, she had a hysterectomy performed for no definitive reason. Seven years prior to admission, the patient was seen by a neurologist who admitted her to a hospital for three weeks work-up but could find no etiology for her headaches. At the time of discharge from the hospital, she was given five bottles of medicine; some were for pain and others for nerves. She also saw a chiropractor about six years prior to admission and received frequent spine manipulations, but she continued to take over-the-counter analgesics in copious quantities. The head pain would begin on either side, the front or the back of her head. It would last for one to three days with great severity and then disappear, only to occur again in a day or so. She had frequent episodes of crying due to the severity of pain. This pain had been severe for more than twenty years, especially since her second marriage twelve and one-half years ago.

The patient bought her headache powders not by the package, but by the case. She never took a single headache powder; she usually took two at a time, and quite frequently would repeat this up to six times each day. She subsequently shifted to a combination tablet and would consume a bottle of 100 tablets weekly. A bottle would never last over two weeks.

Her past history revealed that she had many episodes of gastrointestinal upsets for which she had many upper GI series and barium enemas performed. She was also chronically anemic with occasional stools being positive for occult blood. She had also passed a kidney stone in the past, but she never had one analyzed. She stated that she only had passed tissue and no stones were ever observed. It is noteworthy that this patient had been treated many times for episodes of urinary tract infection and/or pyelonephritis in the past.

At the time of diagnosis, the blood urea nitrogen was 62 mg, the creatinine 6.9 mg, and the glucose 84 mg per dl. The hemoglobin was 8.6 gm % and the hematocrit 27.8 %. The creatinine clearance was 25 ml per minute. The 24 hour protein excretion was 0.5 gm. The urine sediment contained 8 to 10 red blood cells and too numerous to count white blood cells per high power field, and heavy bacteria. The stool was negative for occult blood. After the patient was taken

off analgesics for approximately one year, her blood urea nitrogen came down to 45 mg and the creatinine to 4.4 mg %. The hemoglobin rose to 11.5 gm % and the hematocrit to 33.8 %.

Recently she complained of a sudden onset of left flank pain that radiated into her groin. The pain was associated with nausea and vomiting. Retrograde studies after hospitalization revealed a filling defect in the left ureter and a mildly dilated left calyceal system (see Figure 2). A lucent filling defect, believed to be papillary necrosis, was seen in the superior calyx. Again there was no evidence of reflux or evidence of any bladder disease. The patient was discharged home on conservative management.



Figure 2. Left retrograde pyelogram: there are filling defects in the upper part of the left ureter, corresponding to impacted renal papillae.

A follow-up retrograde one month later again revealed filling defect of left lower ureter. A basket extraction was performed of tissue that pathological studies proved to be necrotic renal papillae. Follow-up retrograde three weeks later revealed absence of obstruction and the classic findings of total papillary necrosis (see Figure 3).

Summary

Analgesic associated nephropathy has been found to contribute significantly to the etiology of end stage renal disease in Australia, Canada, Britain, Switz-



Figure 3. Left retrograde pyelogram: classic "ring signs" of total papillary necrosis.

erland and Scandinavia. Many persons feel this is also true in this country, but data to prove this is not yet available due to our low index of suspicion.

The disease affects predominately females, with a ratio of 6 to 1. The peak incidence is in the fifth decade. Common in this patient population are psychosocial problems ranging from anxiety and depression to addiction habits. A variety of drugs, mainly sedatives, analgesics, hypnotics and tranquilizers, are involved. Almost all analgesics that have been on the market long enough are being found to be nephrotoxic. Phenacetin is the most important one; others are salicylates and acetaminophen. The combination of aspirin, caffeine and phenacetin is probably the worst.

Clinical manifestations involve organ systems most vulnerable to these compounds — the gastrointestinal, hematological, and renal systems. Renal papillary necrosis constitutes the clinicopathological hallmark of the disease. Undiagnosed, this disease will progress to end stage renal disease over a variable period of time. Progression of the renal lesion can be stopped, and the renal function even improved, with discontinuation of analgesics. Management should be aimed at avoidance of all incriminating drugs. Conservative management consists of monitoring salt and water balance and checking for superimposed urinary tract infections. Control of hypertension and an awareness of complications, such as urinary tract obstruction and transitional cell carcinoma of the renal pelvis and ureter, are also indicated. ★★★

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We must not only give what we *have*;
We must also give what we *are*.

JOSEPH CARDINAL MERCIER

Clinical Osmometry in Patients Having an Impaired Sensorium or in Coma

LEO J. SCANLON, M.D.

Vicksburg, Mississippi

MODERN CLINICAL OSMOMETERS can aid the physician in the correct emergency diagnosis and treatment of patients in coma, semi-coma or who have an impaired sensorium.

Such conditions as ethanolism, diabetes without ketosis but with hyperosmolar coma or semi-coma, are rapidly diagnosed using an osmometer. When hyper- or hyponatremia is suspected, the osmometer can rapidly aid in the correct diagnosis and treatment. In similar fashion, the state of hydration of infants and adults can be established. As a monitor for patients receiving total parenteral nutrition, the osmometer is a necessity.

The clinical osmometer measures the total osmotic pressure of the serum and other body fluids. No reagents are needed, and the test takes only one to three minutes to perform. In fact, after the test has been performed, the sample of serum can be unfrozen and used for another test, if needed.

Measurements

The clinical osmometer reports its values in milliosmols per liter of body fluid. For clinical purposes a kilogram of extracellular fluid can be equated with a liter of extracellular fluid. The normal adult values are 285-290 milliosmols per liter. Values below 285 mOsm/L indicate either low serum sodium values or overhydration, or both. Some hyperlipemic bloods give a low osmolarity. Values greater than 290 mOsm/L are seen in hypernatremia, azotemia, lactic acidosis, diabetes mellitus and as an adverse drug

reaction in recently described iatrogenic diseases, to be discussed below.

Modern clinical osmometers can aid physicians in diagnosing and treating patients who are in coma or semi-coma, or who have an impaired sensorium. The author describes the osmometer's value in diagnosing a relatively new syndrome which has a 40% mortality rate.

The expected serum osmolarity can be easily calculated using the following equation:

$$\text{Expected osmolarity} = \text{Na in mEq/L times } 1.86 + \frac{\text{glucose in mg \%}}{18} + \frac{\text{BUN}}{2.2}$$

As an example:

Na - 145 mEq/L, BUN - 22, Glucose - 100 mg%

$$(145) \times 1.86 + \frac{100}{18} + \frac{\text{BUN}}{2.2} = 269.7 + 5.5 + 10 =$$

285 calculated serum osmolarity in mOsm/L.

It is readily apparent that the sodium ions and the corresponding anions constitute the vast majority of the serum's osmotic pressure.

Physicians often are not aware of the tremendous force of a single milliosmol upon the cells of the human body. One osmole (1,000 milliosmols) is the

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osmotic pressure created when one gram molecular weight of a non-electrolyte goes into solution. One osmole is equivalent in millimeters of mercury to 17,000 mm. Therefore, one milliosmol equals 17 mm of mercury pressure. Think for a moment of how a person's arm feels when a blood pressure cuff is inflated to 170 mm of mercury. This is equivalent to an increase of just 10 milliosmoles in that person's extracellular fluid. The normal serum osmolality of 290 mOsm/L is itself equal to 4,930 mm of mercury pressure.

Emergency Room Use

Recent experience with osmometry in the emergency room of hospitals has shown that alcoholic intoxication is the leading cause of elevated serum osmolality and sensorium disturbances in patients.¹ An ethanol blood level of 150 mg% (legally "DWI" in Mississippi) adds 30 mOsm/L to the normal serum osmolality. An alcohol blood level sufficient to cause advanced intoxication can add as much as 75 mOsm to the serum osmolality. An emergency room physician faced with a semi-comatose or comatose patient can readily obtain a blood glucose and BUN to confirm his diagnosis of ethanol intoxication, as the BUN and glucose will be normal in face of the grossly elevated serum osmolality. One caution must be stated — if your laboratory uses a vapor pressure type osmometer it will not detect the ethanol; a true freezing point type osmometer must be used.

As a rough guide, the serum osmolality increase due to ethanol is determined by multiplying the blood alcohol in mg% by 0.2 to determine the "added" milliosmoles. Stated another way — subtract 290 from the serum osmolality and multiply by 5 to estimate the blood alcohol in mg%.

Example — A patient comes to the emergency room and is semi-comatose or clinically drunk. A blood glucose is normal and he does not have a uremic smell. His serum osmolality is found to be 350 mOsm/L; therefore, $350 - 290 = 60 \times 5 = 300$ mg% ethanol. This is a useful and rapid method of estimating the blood ethanol levels.

Patients with diabetes, especially when acidotic and ketotic, will typically have elevated serum osmolalities. The osmometer aids in guiding the intravenous therapy so that overhydration is avoided.

HNDS Syndrome

Within the past 20 years a "new" syndrome has been noted with increasing frequency. This disease or syndrome carries a 40% mortality rate, yet many

physicians are not fully aware of it.² This disease entity is known as **Hyperosmolar, Non-ketotic Diabetic Syndrome**. This entity is often under-rated by the physician first seeing the patient because of the absence of acetone or minimal evidence of ketosis in a diabetic. A frequent mistake is to equate the magnitude of ketosis and blood pH changes with the severity of the diabetes. It is here that the clinical osmometer can be lifesaving, because of its ability to demonstrate the extreme increase in serum osmolality due to glucose, which does not diffuse into the cells.

Often patients coming into hospital emergency rooms with HNDS (Hyperosmolar Non-ketotic Diabetic Syndrome) were not previously known to be diabetic. If they were known diabetics, the diabetes was an adult onset type in middle age, and clinically not severe. Hence the physician seeing these patients could easily fail to appreciate that he was dealing with a 40% mortality disease syndrome.

Disease Characteristics

Some features of the HNDS are: (1) Age — it is a disease of middle age or elderly. (2) Sex — it is more common (2:1) in women. (3) Blood pH is usually normal or slightly depressed. (4) Absence of Kussmaul type respiration will be noted. (5) Sensorium is impaired, and can range from confusion to coma. (6) Ketones — seldom over 2+. (7) Acetone — seldom over 2+. (8) Blood glucose is typically over 350 mg%. (9) Serum osmolality is greater than 340 mOsm/L. (10) Dehydration is present and often severe. (11) Drugs — HNDS can be precipitated or aggravated by propranolol,³ lithium carbonate, steroids, phenform, diphenylhydantoin, thiazide and furosemide diuretics, azathiaprime and diazoxide. (12) Trauma can cause it. (13) Burns can cause it. (14) Myocardial infarction may be a cause. (15) Cerebrovascular accidents may be causes. (16) Parenteral hyperalimentation is often a factor. (17) Peritoneal dialysis can cause it. (18) Any or several mechanisms listed can act together to "set off" the HND syndrome.

The Literature

Relatively few postmortem studies of patients dying of hyperosmolar nonketotic diabetic syndrome are recorded in the literature. Those documented autopsy studies have shown a high incidence of acute pancreatitis and the DIC (Disseminated Intravascular Coagulation) syndrome. A high incidence of brain damage has been observed in autopsied cases.

The basic pathophysiology of HNDS is a massive glucose elevation of the extracellular tissues, apparently due to gluconeogenesis of protein, coupled with a blockage of free fatty acid mobilization or suppression of lipolysis. Speculation among investigators has centered upon liver failure to convert acetyl-coenzyme A to ketones and a deficiency of needed adipokinetic hormones. Blockage of lipolysis by propranolol has been demonstrated by Podolsky.³ The profound dehydration seen in patients with HND syndrome itself has been implicated as a cause of faulty fatty tissue response.

Treatment

Treatment of HNDS is itself a controversy. Most workers use hypotonic saline, with insulin and potassium intravenously. Speed is important in

treatment. After the patient stabilizes, a protracted osmotic diuresis may continue for several weeks.⁴ Also, patients having once gone into the HND syndrome are prone to have repeated episodes unless carefully managed. The mean water deficit in patients with diabetic ketoacidosis is 4.4 liters, whereas patients with HND syndrome have a mean water deficit of 9.1 liters. In general, patients with non-ketotic coma have fluid losses that average 24% of their body water.⁴ ★★★

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“In the early days of government regulation — around the turn of the century — the purpose of regulating was very clear. Flatly stated, it was to guard against abuse. A regulator’s job was to tell you what you could not do. Gradually, the focus of regulation has changed. Rather than telling us what not to do, today’s regulators have begun to dictate not only what we must do but also how we must do it . . . this notion that government provides the best instrument for allocating resources, answering society’s needs, and making economic decisions implicitly rejects the free enterprise system . . . and the price we pay for it all is enormous . . . the cost to industry for this regulatory excess is \$3 billion for salaries and supplies of the 100,000 federal workers who staff the 41 regulatory agencies and \$85 billion in compliance costs. Loss of income from having to invest in non-productive rather than productive projects is estimated at \$13 billion.”

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The President Speaking

Looking Forward to a New MSMA Year

GERALD P. GABLE, M.D.
Hattiesburg, Mississippi

For those of you who were unable to attend the annual MSMA convention on the coast last month, I would like to extend my greetings as your new president. It was a most fruitful meeting with good (but not good enough) attendance. The House of Delegates addressed itself to the business at hand, the highlights of which are published elsewhere in this issue of the JOURNAL. The scientific sessions were of excellent quality in all of the sections, with scholarly presentations by both our out-of-state guest speakers and by our in-state speakers. As one of our section chairmen so appropriately stated — we no longer *have* to go out of state to get good speakers for our meetings, because we have excellent medical talent within the state from which to choose.

It is with a sense of humility and pride that I accept from Carl Evers the reins of leadership of our association. We have a good, steadily improving and growing association. Your Board of Trustees is composed of dedicated men who unselfishly give of their time to keep informed and abreast of the current problems facing the physician today in the changing world of medicine. They address themselves to these problems during the interim between the sessions of the House of Delegates, and during the past few years have been responsible for forming our malpractice insurance society which is steadily growing and is on a sound financial footing. During the past year much time and effort has been devoted to the implementation of the Disabled Physicians Program for our members who have had a problem with drug or alcohol dependency, and this program has been most rewarding. Your Board of Trustees has likewise secured a public opinion poll of health care in Mississippi, and some of these results are most interesting and informative when we see how we “appear in the looking glass” as viewed by our patients. More discussion will be devoted to this subject in later messages. Your association has also had a select committee to formulate a study of the health care needs of our state which will give us some sense of priorities and direction in supplying these needs, since our opinion of these needs does not always correspond with those of some politicians and bureaucrats.

Yes, we have a viable, growing, financially sound association which will try to keep you informed and will try to organize our best collective efforts to face our problems ahead and render to our patients the finest medical care.

Reflections on Obesity Surgery

In 1970, after the initial work of Dr. Howard Payne in Los Angeles, we became interested in surgery of the obese. Our work began with a 460-pound female who had a huge ovarian cyst. This cyst subsequently weighed 40 pounds and while we were within her peritoneal cavity, we chose to do an intestinal bypass. Since then, our experience with intestinal bypasses includes about 127 cases.

The majority of these people, in addition to being at least 100 pounds overweight, were subject to diabetes and hypertension. Half of the hypertensives returned to normal and all of the diabetics returned to normal, with a weight loss of from 75 to 100 pounds. Although there have been many happy cases in this group who have re-entered society with their 100 pound weight loss, change in appearance and even personality change, about 10 per cent of these patients have had rather unrelenting diarrhea producing excessive weight loss, hypokalemia, hypocalcemia and hypoproteinemia. Although these people have shown some abnormalities in liver function studies, we have not seen any frank liver failure.

In 1974, because of the problems we had encountered with the intestinal bypass, we abandoned this procedure and began our study of the gastric bypass which was popularized by Dr. Edward Mason of the University of Iowa. Our initial efforts with this procedure were rather discouraging as it was a long, tiring, difficult operation occurring as someone had described, "in the attic of the peritoneal cavity." However, postoperatively, the patients did well, and with the decreased capacity of the stomach, there were no real problems such as electrolyte imbalance, diarrhea, etc., as was encountered in the intestinal bypass. With the arrival on the scene of the stapling devices, this procedure was immeasurably improved, and our operating time was decreased from around four hours to an hour and one-half to two hours.

Our experience now encompasses around 50 patients and has been most encouraging. It is not neces-

sary for these people to take any potassium or calcium or any food supplements. There have been two deaths in this series. Both were due to leaks at the anastomotic site of the gastrojejunostomy. We believe they were both due to over-enthusiastic dissection of the upper one third of the stomach, producing a compromised blood supply along the greater curvature. Since that time, we are very careful to preserve as much blood supply in this area as we possibly can, and to be particularly gentle in our handling of this portion of the operative procedure.

These patients are losing an average of 75 pounds and are quite satisfied. We believe that this procedure will be a lasting one and that it is indicated in the morbidly obese patient. We are classifying these people in two categories. The first group is the morbidly obese. Their weight is so excessive, and accompanied by either diabetes or hypertension or both, that their life is actually threatened. The other group is the intractably obese. They are 100 pounds above their ideal weight and can not control their weight in spite of concerted, sincere efforts. Gastric bypass surgery should be considered for these people as it not only will prolong their life, but will greatly improve its quality.

R. J. FIELD, JR., M.D.
Centreville, MS

Medico-Legal Brief

MD Allegedly Intimidated Witness

A physician's misconduct in allegedly intimidating two expert witnesses who testified against him in a malpractice suit warranted a new trial against him after he was found not negligent in the suit, a Maryland appellate court ruled.

A patient filed suit against his physician for negligence in performing back surgery. He claimed that he suffered sexual impotency and lack of bowel and bladder control after the operation.

During the trial the physician allegedly contacted

through other physicians the two expert witnesses who later testified against him at the trial. He allegedly informed them that their testimony would be transcribed and disseminated to their local medical societies. To one of them the physician allegedly suggested that testifying might not be a particularly good idea since the oral portion of the expert's board certification examinations were to be held in the near future.

The trial court instructed the jury that evidence of the physician's tampering with the witnesses was admissible only for the purpose of raising an inference that the witnesses's testimony would be unfavorable to him. The jury returned a verdict in favor of the physician, and the patient appealed.

Reversing the lower court's verdict, the appellate court said that the physician's conduct was outrageous. In both cases the physician contacted physicians who were mentors of and highly respected by the testifying physicians. Both physicians testified that the conversations with their former mentors had significant effects on their testimony.

The appellate court said that the evidence concerning the physician's tampering with the witnesses should have been introduced as directly bearing on the physician's negligence. The evidence could be used as direct evidence of the physician's conscious realization of the weakness of his case, the court concluded. — *Meyer v. McDonnell*, 392 A.2d 1129 (Md.Ct. of Special App., Nov. 2, 1978)

PERSONALS

JAMES L. ACHORD of Jackson and UMC was guest speaker at recent meetings of the Mississippi Dietetic Association in Biloxi and the Lauderdale County Medical Society in Florence, AL. He was a member of the guest faculty for a workshop at Georgia Baptist Hospital in Atlanta in April.

BLAIR E. BATSON, UMC pediatrics department chairman, attended meetings of the American Academy of Pediatrics in Toronto, Canada, as a member of the executive board.

THOMAS BLAKE of Jackson and UMC attended the recent annual meeting of the board of governors, American College of Physicians, in San Francisco.

A. W. CONERLY of Jackson and UMC recently presented a series of lectures on respiratory care at Jefferson Davis Hospital in Natchez.

EDGAR DRAPER, psychiatry department chairman at

UMC, was examiner for the American Boards of Psychiatry and Neurology in New Orleans in April.

W. MELVIN FLOWERS, UMC associate professor of radiology, was a delegate to the April American College of Nuclear Medicine meeting in Hollywood, FL.

JOHN E. FORESTNER of Jackson and UMC presented a paper before the meeting of the Section on Anesthesia, American Academy of Pediatrics, which was held in Toronto, Canada.

GERALD P. GABLE was keynote speaker for the annual convention of the Mississippi Society of the American Association of Medical Assistants, which was held in Meridian in April.

JAMES D. HARDY, UMC surgery department chairman, was an examiner for the American Board of Surgery in Chicago in April.

ALLEN U. HOLLIS of Jackson announces the removal of his office for the practice of general, thoracic and vascular surgery to 500-D E. Woodrow Wilson.

HERBERT G. LANGFORD of Jackson and UMC conducted a seminar at Georgetown University School of Medicine in Washington, D.C., in April.

ROBERT A. LITTLE of Biloxi has been elected chief of surgery at the Gulf Coast Community Hospital at Biloxi and has been reappointed president of the board of directors, Garden Park Community Hospital, Gulfport.

ANDREW PARENT, UMC assistant professor of neurosurgery, presented a paper at the recent meeting of the American Association of Neurological Surgeons in Los Angeles.

W. LAMAR WEEMS of Jackson and UMC was visiting professor at the University of New Mexico Medical Center in Albuquerque.

WINFRED WISER of Jackson and UMC participated in the sickle cell disease program of the Consensus Development Workshop, National Institute of Health, in Bethesda, MD.

DEATHS

W. W. OSER, Picayune. Born New Orleans, LA, July 19, 1922; M.D., Louisiana State University School of Medicine, New Orleans, 1952; interned Mid-State Baptist Hospital, Nashville, TN, 1952-53; died April 22, 1979, age 56.

Tulane Surgery Professor Presents Lecture



The Amite-Wilkinson Medical Society and the Field Memorial Community Hospital recently presented their first annual lecture. Dr. R. J. Field of Centreville, right, served as program chairman. Pictured with Dr. Field are, from left, Andrew Truelove, Field Hospital administrator; Dr. Jennings Owens of Woodville, chief of staff of Field Hospital; and Dr. Earl Peacock, professor of surgery at Tulane University, who presented the subject "A Scientific Look at the Shroud of Turin."

Family Physicians Meet in July

The 31st Scientific Assembly of the Mississippi Academy of Family Physicians will be held July 11-14, 1979, at the Biloxi Hilton.

The meeting will provide up to 29 hours of continuing medical education credit. Registration fee is \$25.00 for academy members and non-member physicians. There is no registration fee for interns, residents, students and nurses. For more information write: Mississippi Academy of Family Physicians, P. O. Box 12330, Jackson, MS 39211.

Diabetes Seminar Is Next Month

A seminar on diabetes mellitus is scheduled for Thursday, July 19, at the Forrest County General Hospital. Co-sponsors are the Forrest County General Hospital, the Diabetic Youth Camp and the Hattiesburg Clinic.

Continuing Medical Education credit has been approved by the American Medical Association and the American Academy of Family Practice.

Topics for discussion will include a review of pathophysiology, a review of acute treatment and office and outpatient management, evaluation of the

importance of diet, and an evaluation of the available laboratory procedures to aid in the treatment of and diagnosis of diabetes.

There is no charge for registration. For more information write to Dr. W. J. Huddleston, Hattiesburg Clinic, P.A., 415 South 28th Ave., Hattiesburg, MS 39401.

POSTGRADUATE CALENDAR

June 27, 1979

OFFICE MANAGEMENT OF HYPERTENSION
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine and the Medical Center Division of Continuing Health Professional Education under a grant from Pennwalt Pharmaceutical Division.

Coordinator: Herbert G. Langford, M.D., professor of medicine and chief of the endocrine and hypertension division, University of Mississippi School of Medicine.

This seminar will discuss nonpharmacologic and pharmacologic approaches to the management of hypertension. A film outlining current concepts in office management of high blood pressure will be presented. Dr. James C. Melby, professor of medicine and head of the section of endocrinology and metabolism at Boston University School of Medicine, is guest speaker. Fee: none. Credit: 3 contact hours, .3 CEU, Category I of the Physician's Recognition Award, AMA.

July 26-28, 1979

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
Delta Medical Center, Greenville

Sponsored by the University of Mississippi School of Medicine Department of Anesthesiology and the Medical Center Division of Continuing Health Professional Education.

Coordinators: G. H. Holloman, M.D., Delta Medical Center; and Thomas J. Herrin, M.D., associate professor of anesthesiology, University of Mississippi School of Medicine.

Open to physicians and registered nurses who have been certified by the American Heart Association in basic life support, this course will be taught by faculty qualified by the American Heart

POSTGRADUATE / Continued

Association as advanced cardiac life support instructors. Fee: \$110. Credit: 12 contact hours, 1.2 CEU, Category I of the Physician's Recognition Award of the AMA; AAFP.

July 27-28, 1979

SUPPORTIVE CARE FOR THE ONCOLOGY PATIENT
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine and the Medical Center Division of Continuing Health Professional Education.

Coordinator: J. Tate Thigpen, M.D., associate professor of medicine and assistant professor of obstetrics and gynecology, University of Mississippi School of Medicine.

This is the first in a series of quarterly symposia for the general practitioner, internist, surgeon and radiation therapist. Daily management and supportive care of the cancer patient will be emphasized. Fee: \$40.00. Credit: 8 contact hours, .8 CEU, Category I of the Physician's Recognition Award, AMA.

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In Appreciation

The many fine technical exhibitors who participated in the exhibit during the recent Mississippi State Medical Association 111th Annual Session are deserving of our recognition and a hearty "Thank You!" Not only did the presence of these exhibits enhance the educational quality of our meeting, but the support provided by our exhibitors is essential to the continuance of our traditionally outstanding scientific program.

The firms listed below participated in our 1978 annual meeting exhibit and we voice a collective expression of our sincere appreciation. May we also suggest that you retain this listing and express your personal appreciation when their representatives call upon you.

Ames Division, Miles Laboratories, Elkhart, IN
Ayerst Laboratories, New York, NY
Bedsol Surgical Supply Co., Mobile, AL
Blue Cross & Blue Shield of MS, Inc., Jackson, MS
Boehringer Ingelheim Ltd., Ridgefield, CT
Bristol Laboratories, Syracuse, NY
Capitol Planning Service, Jackson, MS
CIBA Pharmaceutical Co., Arlington, TX
Commerce General Corp., Memphis, TN
Deposit Guaranty National Bank, Jackson, MS
Dista Products Co., Indianapolis, IN
Encyclopedia Britannica, Chicago, IL
Family Health Services, Jackson, MS
Filing Equipment, Inc., Chattanooga, TN
First National Bank, Jackson, MS
General Medical, Jackson, MS
Healthco, Jackson, MS
Hoechst-Roussel Pharmaceuticals, Inc., Somerville, NJ
The Jobst Institute, Toledo, OH
Johnson & Johnson Dermatological Div., Brunswick, NJ
Kremers-Urban Co., Milwaukee, WI
Lanier Business Products, Jackson, MS
Mallinckrodt, Inc., St. Louis, MO
Mead Johnson Pharmaceutical Div., Evansville, IN
Medical Information Systems, Inc., Jackson, MS
Merck Sharp & Dohme, West Point, PA
Meyer Laboratories, Fort Lauderdale, FL
MS Medical Fraternal & Education Society, Jackson, MS
Navy Recruiting, Memphis, TN
Niagara Therapy Manufacturing Corp., Metairie, LA
Olympus Corp., Kenner, LA
Pennwalt Rx Div., Rochester, NY
Pfizer Laboratories, Doraville, GA
Wm. P. Poythress & Co., Inc., Richmond, VA
Professional Planning Associates, Jackson, MS
Randall Howard & Associates, Inc., Memphis, TN
A. H. Robins Co., Richmond, VA
Roche Laboratories, Nutley, NJ
Sandoz Pharmaceuticals, E. Hanover, NJ
Schering Corp., Kenilworth, NJ
Searle Laboratories, Chicago, IL
Smith Kline & French Laboratories, Philadelphia, PA
South Central Bell Marketing, Jackson, MS
St. Paul Fire and Marine Insurance Co., St. Paul, MN
Systemedics/AMS, Laurel, MS
The Travelers Insurance Co., Jackson, MS
U.S. Air Force Medical Team, New Orleans, LA
U.S. Army Medical Dept., New Orleans, LA
USV Laboratories, Tuckahoe, NY
Warren-Teed Laboratories, Columbus, OH
Weight Watchers, Jackson, MS
Wyeth Laboratories, Philadelphia, PA

Scientific Grants Were Received From

Abbott Laboratories	A. H. Robins
Bristol Laboratories	William H. Rorer, Inc.
Eli Lilly and Company	Ross Laboratories
Merck Sharp & Dohme	Stuart Pharmaceuticals
Pfizer Laboratories	The Upjohn Company
Mead Johnson Pharmaceutical Division	

Special Sponsorship

Blue Cross-Blue Shield of Mississippi

Annual Session Highlights Include Dr. Gable's Inauguration, Dr. Caldwell's Election

Highlighting the closing day's meeting of the House of Delegates at the recent 111th Annual Session were elections of new officers and the inauguration of Dr. Gerald P. Gable of Hattiesburg as president, succeeding Dr. Carl G. Evers of Jackson. Dr. Robert S. Caldwell of Tupelo was named president-elect of the association.

In other elections, Dr. James W. Rayner of Oxford, Dr. Barry W. Holcomb of Vicksburg and Dr. Louie F. Wilkins of Brookhaven were named vice presidents. Dr. J. Elmer Nix of Jackson was re-elected to another three-year term as association secretary-treasurer, and Dr. Myron W. Lockey of Jackson was re-elected to another term as associate editor.

Named to the Board of Trustees were Dr. Whitman B. Johnson of Clarksdale, Dr. W. Joseph Burnett of Oxford and Dr. William C. Gates of Columbus.

Dr. James O. Gilmore of Oxford was elected as delegate to AMA, his term beginning in January of 1980. Dr. Stanley A. Hill of Corinth was named alternate delegate to AMA.

Elected to the Council on Budget and Finance were Dr. Bruce M. Kuehnle of Natchez and Dr. Matthew J. Page of Greenville. Dr. Mary J. Ward of Corinth was named to the Council on Constitution and Bylaws. Elected to three posts on the Judicial Council were Dr. W. Richard Campbell of Columbia, Dr. David R. Steckler of Natchez and Dr.



Three years of the MSMA presidency are shown, from left, Dr. Gerald P. Gable of Hattiesburg, 1979-80 president; Dr. Carl G. Evers of Jackson, immediate past president; and Dr. Robert S. Caldwell of Tupelo, president-elect.

ELECTIONS / Continued

Dewey H. Lane, Jr., of Pascagoula.

Named to the Council on Legislation were Drs. S. Lamar Bailey of Kosciusko, Robert O. May of Jackson and Sidney W. Bondurant of Philadelphia.

Dr. James C. Waites of Laurel, Dr. William E. Godfrey of Natchez and Dr. Karl B. Horn of Pascagoula were elected to the Council on Medical Education.

Named to the Council on Medical Service were Dr. C. Foster Lowe of McComb, Dr. Charles N. Floyd of Gulfport, and Dr. David M. Owen of Hattiesburg.

Nominated for appointment to the Mississippi State Board of Health were Drs. G. Spencer Barnes of Columbus, Benton M. Hilbun of Tupelo, William H. Preston of Booneville, Donald R. Ellis of Clarksdale, J. Edward Hill of Hollandale and Virginia S. Tolbert of Ruleville.



Dr. R. Faser Triplett of Jackson presided as Speaker of the House of Delegates.

Annual Session Registration Exceeds 800

More than 800 physicians, spouses and guests attended the 111th Annual Session held last month at the Biloxi Hilton. This number included auxiliary members, exhibitors, guests, students, staff members and 467 MSMA members. Chairman of the Council on Scientific Assembly, Dr. J. Elmer Nix of Jackson, reported that registration figures were down slightly from the previous year's meeting in Jackson, reflecting a smaller number of medical students attending.

During the five-day meeting, 14 scientific sections conducted courses, 15 specialty societies held meetings, the MSMA Auxiliary conducted its 56th

Annual Session, and several related organizations held concurrent meetings.

Specialty societies meeting on Sunday included: the Mississippi Society of Anesthesiology, Mississippi Neurosurgical Society, Mississippi Orthopedic Society, Mississippi Psychiatric Association and the Mississippi Association of Pathologists. Tuesday's agenda included meetings of the American College of Surgeons, Mississippi Chapter; Mississippi Perinatal Association; American College of Pediatrics, Mississippi Chapter; and the Mississippi Society of Internal Medicine. The Academy of Facial Plastic and Reconstructive Surgery met on Wednesday, as did the Mississippi Dermatological Society, Mississippi EENT Association, Mississippi Ob-Gyn Society, Mississippi Academy of Family Physicians and the Mississippi Urological Society.

The Mississippi Medical Fraternal and Educational Society held its third annual membership meeting on Sunday, May 6. Speakers were Dr. C. G. Sutherland of Jackson, chairman of the claims committee and C. R. Montgomery of Canton, legal counsel to the society.

The Mississippi Foundation for Medical Care conducted its annual meeting on Monday. Dr. Thomas Rowland, chairman of the Quality Assurance Committee of South Carolina PSRO was guest speaker. The MFMC also conducted a Medical Audit Seminar on Tuesday, May. Speaker was Dr. Richard E. Thompson of the Illinois Hospital Research and Education Foundation.

The Mississippi Clinic Managers Association sponsored a practice management seminar on Sunday. "Diseases of the Stomach" was the title of a seminar conducted on Monday by the Mississippi Gastrointestinal Association. The Mississippi Urological Association held a seminar on "Urology for the Family Practitioner" on Wednesday, May 9. A short course in Tonometry for family physicians was sponsored by the Mississippi Society for the Prevention of Blindness on Wednesday.



Members of the House of Delegates prepare to mark ballots during Thursday's session.

Also holding meetings during the five-day session were the Flying Physicians Association, Mississippi Chapter; the Mississippi Commission on Hospital Care; MSMA's Past Presidents and MSMA's Fifty Year Club; and medical alumni from Tulane, Tennessee and Ole Miss.



Dr. J. Elmer Nix of Jackson, Chairman of the Council on Scientific Assembly, reports to the House of Delegates.

Scientific Assembly Begins Work for '80

The 1980 annual session is set for April 27-May 1 in Biloxi, according to Dr. J. Elmer Nix of Jackson, chairman of the Council on Scientific Assembly. This summer the council will meet to review preliminary plans for the 112th annual session and to begin work on the program.

During the recent 111th annual session, 14 new section chairmen were named, and 7 section secretaries were elected. According to the bylaws of the association, section chairmen serve a term of only one year, but section secretaries are elected for three years to provide continuity. Secretaries of the sections are elected on staggered terms.

Each office carries an automatic seat and vote in the House of Delegates to assure proper representation of each scientific specialty.

Named to head the Section on Anesthesiology is Dr. Homer Horton of Tupelo. Dr. David I. Carlson of Jackson begins his third year as section secretary.

Dr. John A. Marascalco of Greenville was elected

chairman of the Section on Dermatology. Secretary will be Dr. D. F. Barraza of Natchez.

Dr. Henry Sanders of McComb will chair the Section on EENT. Dr. W. Joseph Burnett of Oxford begins a three-year term as secretary.

The Section on Family Practice will be headed by Dr. James O. Stephens of Magee. Dr. Gene Crick of Minter City enters the final year of his term as section secretary.

Chairman of the Section on Medicine is Dr. Jim Sones of Jackson. Dr. Don Mitchell, also of Jackson, was re-elected to another term as secretary.

Dr. H. Lamar Gillespie of Hattiesburg will chair the Section on Obstetrics and Gynecology. Dr. William L. Kahlstorf of Tupelo enters his second year as secretary.

Dr. J. Stewart Williford of Hattiesburg was named to the post of chairman of the Section on Orthopedic Surgery. Section secretary Dr. George W. Wharton of Jackson enters the third year of his term.

Pathologists chose Dr. William B. Wilson of Jackson as chairman of the Section on Pathology. Dr. T. G. Puckett of Hattiesburg is the new secretary.

Dr. Robert L. Buckley of Columbus was named chairman of the Section on Pediatrics. Section secretary is Dr. William B. Simmons of Meridian.

The Section on Preventive Medicine chose Dr. Clyde Watkins of Jackson as chairman. Dr. Thomas E. Waller of Starkville begins his second year as secretary.

Dr. Glen Anderson of Jackson was named chairman of the Section on Psychiatry. Serving a three-year term as secretary will be Dr. Julius Collum of Jackson.

The Section on Surgery named Dr. George V. Smith of Jackson as chairman. Dr. Jerry R. Adkins of Biloxi was re-elected to another term as secretary.

Dr. William F. Pontius of Ocean Springs was named to chair the Section on Radiology. Section secretary, Dr. Sandra Rhoden of Jackson, will serve two more years.

The Section on Urology will be chaired by Dr. Lucas O. Platt of Tupelo. Dr. Ronald L. Brown of Gulfport enters his second year as secretary.

Ex officio members of the Council on Scientific Assembly are the association president, Dr. Gerald P. Gable of Hattiesburg and the president-elect, Dr. Robert S. Caldwell of Tupelo.

112th Annual Session
April 27-May 1, 1980 at Biloxi

The Maker

Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally “expensive” and generic versions are relatively “cheap.” To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were

not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

MYTH: Industry favors only “expensive” brand names and denigrates all generics.

FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.



Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

The maker does matter

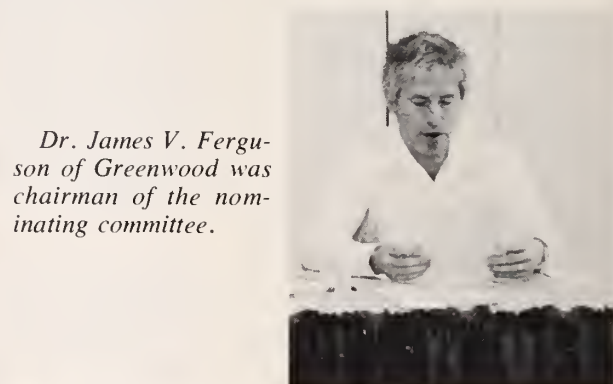
After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005



Dr. Walter H. Rose of Indianola, upper left, served as vice speaker of the House. Opposite, Mrs. G. S. Rowlett, Jr., of Vicksburg, 1978-79 president of the MSMA Auxiliary, reported to the House of Delegates at Monday's meeting. At lower left and upper right, members of the reference committees attended a breakfast meeting on May 7. At lower right, members of the nominating committee were briefed on their duties.



Dr. James V. Ferguson of Greenwood was chairman of the nominating committee.



111th Annual Session, May 6-10, 1979

HOUSE OF DELEGATES HANDLES BUSY AGENDA

The House of Delegates of the Mississippi State Medical Association handled a busy agenda of reports and resolutions at the recent 111th Annual Session of the association in Biloxi. The official transactions of the meeting will be mailed to all delegates.

Among major actions by the MSMA House of Delegates were:

- Adoption of an official position paper on health needs in the state.
- Adoption of 16 recommendations for controlling health care costs.
- Endorsement of new mechanisms to strengthen relationships with medical students and housestaff.
- Establishment of a specific committee to monitor and report on federal/state health programs.
- Endorsement of the AMA's model bill providing for determination of death.
- Amendment of the MSMA Bylaws to permit membership for Doctors of Osteopathy.
- Restatement of support for enactment of the AMA's model bill requiring sequential health education programs in elementary and secondary schools.
- Establishment of the MSMA Disabled Physicians' Program.
- Restatement of the association's position that prescribing of amphetamines and other stimulant drugs should be limited to specific, well recognized indications and that the use of such drugs has no rational basis in the treatment of obesity.
- A recommendation that the state's medical licensing authority require one year postgraduate medical training as a prerequisite for receiving an unrestricted license to practice medicine.

- Restatement of concern over inequities in Medicare fees.
- A recommendation that premium schedules for medical liability insurance should be based on actual cost and risk of providing that insurance to each individual category.
- Scheduling of the 115th Annual Session in Biloxi.
- Presentation of the 1979 MSMA/Robins Award for Community Service to Dr. William L. Jaquith of Jackson.
- Presentation of \$15,565.92 to the University of Mississippi School of Medicine representing 1978 AMA-ERF contributions to the school from Mississippi physicians, alumni and their spouses.

The Reference Committee on Credentials reported seating 118 delegates at the opening session of the House of Delegates on May 7 and 105 delegates at the closing session on Thursday, May 10.

Serving on reference committees of the House were:

Reference Committee on Rules and Order of Business

William C. Gates, Jr., M.D., Chairman
David R. Steckler, M.D.
George L. Arrington, Jr., M.D.

Reference Committee on Constitution and Bylaws

W. Lamar Weems, M.D., Chairman
Mary J. Ward, M.D.
Louis C. Lehmann, M.D.

Reference Committee on Report of Officers, Board of Trustees and Councils

James C. Waites, M.D., Chairman
Samuel B. Johnson, M.D.

D. Stanley Hartness, M.D.
Andrew K. Martinolich, Jr., M.D.
William H. Spragins, M.D.

Nominating Committee

James V. Ferguson, M.D., Chairman (District 1)
David A. Ball, M.D., (District 2)
Dennis Ward, M.D., (District 3)
W. B. Hunt, M.D., (District 4)
Tom H. Mitchell, M.D., (District 5)
Stanley Wade, M.D., (District 6)
Charles R. Jenkins, M.D., (District 7)
David R. Steckler, M.D., (District 8)
Thomas R. Singley, M.D., (District 9)

**112th Annual Session, April 27-May 1, 1980, at
Biloxi — Mark your calendar now!**



Dr. Hoyt D. Gardner of Louisville, KY, president-elect of the American Medical Association, addressed the Monday session of the House of Delegates.

Below, Dr. Carl G. Evers of Jackson delivered his presidential address at Monday's session.



Medical Leaders Speak at Annual Session

National and state medical association leaders voiced praise, criticism and warnings as they spoke to delegates and guests at the Mississippi State Medical Association's 111th Annual Session, held last month at the Biloxi Hilton.

Dr. Hoyt D. Gardner, president-elect of the American Medical Association, praised the medical community, noting that "never have the people been so well served." He stated that of the 400,000 physicians in this country, more than half are members of the AMA — a body which is dedicated to preserving the "quality of the profession" through its accreditation activities, continuing medical education programs, scientific publications, international assistance efforts and legislative activities.

The Kentucky surgeon remarked that medical care is a prime concern of consumers and legislators, pointing to the fact that one-fourth of the 10,000 bills before the 95th Congress had a direct medical connection. He noted that the AMA maintains a Washington office with 30 employees, 6 lobbyists and a \$6 million per year budget.

Dr. Gardner answered charges of "obstructionism" which are often leveled at organized medicine by stating that the AMA is dedicated to the principle that "the people have a right to think for themselves," and he criticized those who "prey on public opinion" and influence attitudes to perpetuate "demagogue-produced thoughts." He further stated that AMA's \$6 million legislative budget is only a small portion of its total \$64 million yearly budget — the vast majority of those funds going to research and programs for the improvement of medicine and for the betterment of mankind.

Dr. Gardner noted that historically, civilization has turned to the "four learned professions — law, medicine, education and religion" for answers to vital questions. Speaking for the largest organized body of physicians in the world, he declared that medicine intends to be a "responsible voice" in answering those questions.

In his address before Monday's session of the House of Delegates, Dr. Carl G. Evers, 1978-79 MSMA president, called for a renewed commitment on the part of association members "to address those issues which besiege our profession."

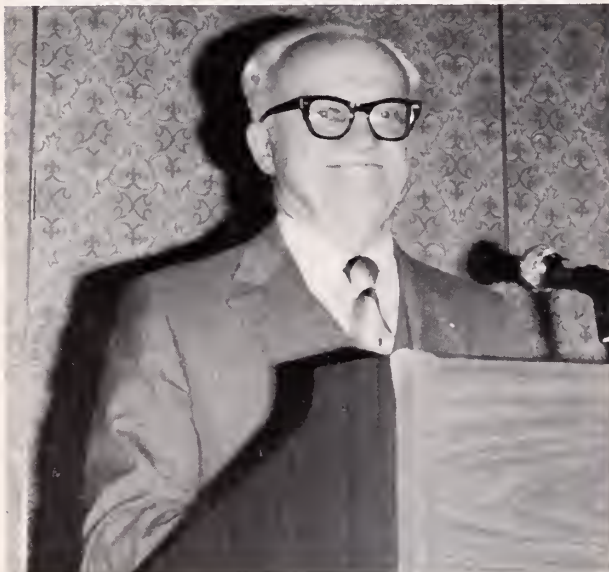
He noted the irony in Mr. Califano's recent call for hospital cost controls and National Health Insurance immediately after describing American people as "among the healthiest people in the world." Dr.

LEADERS SPEAK / Continued

Evers declared that "apparently Mr. Califano doesn't believe in the old adage, 'if it ain't broke, don't fix it.'"

Dr. Evers described two major accomplishments by the association during the past year — the Health Needs Study and the Disabled Physician's Program. He made several recommendations for the coming year. He suggested that members become active during this political year, noting that legislators and other elected officials need to hear from their individual constituents. He called for the formation of a special committee on federal and state health programs which would be charged with the duties of monitoring, informing and coordinating. He urged that the association strengthen its efforts to inform interns and residents about the issues in health care, and to get them involved in organized medicine.

The new MSMA president, Dr. Gerald P. Gable of Hattiesburg, addressed the Thursday session of the House of Delegates. He warned that many physicians may have become apathetic about containing rising medical costs. He called on physicians to render the highest quality care for the most reasonable cost, noting that if the profession can't control costs through voluntary efforts, cost containment dictates from the federal government are certain. "The best defense against the bureaucrats is a well satisfied patient," he said.



Dr. Gerald P. Gable of Hattiesburg, 1979-80 president of the association, makes his inaugural remarks to the House of Delegates.

Dr. Gable also admonished that too many of the state's 2,500 practicing physicians don't find the time to keep themselves informed. He remarked that many MSMA members are content to let the association leaders be their representatives, and are unwilling to contribute their personal efforts. He called for active participation by all members in the programs of the association, in order to best meet the needs of both the patients and the profession.



Dr. James O. Gilmore of Oxford, right, was elected delegate to AMA. He is pictured with past president Dr. Jack A. Atkinson of Brookhaven.

Thompson Memorial Lecture Is Established

The family of Dr. James Grant Thompson has established in his honor a memorial lectureship, with the first to be delivered at next year's 112th Annual Session of the Mississippi State Medical Association.

The announcement was made by Dr. Carl G. Evers, MSMA president, who expressed appreciation on behalf of the association to Mrs. Thompson, her sons Russell and James Grant, and their families.

Opposite page: At lower left, Dr. and Mrs. Hoyt Gardner and Dr. Evers prepare to receive guests at the president's reception. Above, Dr. Robert S. Caldwell and his wife converse with Dr. Lamar Weems of Jackson. Mrs. Carl Evers, second from left, joins Dr. and Mrs. Whitman of Clarksdale and Dr. Sidney Graves of Natchez. Upper left, Dr. Robert Caldwell is pictured with his wife and Dr. Jim C. Barnett of Brookhaven. Upper right, Dr. and Mrs. Evers are shown with their daughter Julie. Not pictured are their daughter Karen and son Gus. Center right, Mrs. Jim C. Barnett, Dr. and Mrs. G. S. Rowlett and Mrs. Gerald P. Gable are shown greeting guests. At lower right, Dr. and Mrs. Gable.



THE PRESIDENT'S RECEPTION





Winners of the MSMA scientific exhibit competition for the 111th annual session are shown above. "Treatment of Selected Fractures with the Wagner Apparatus" by Drs. James L. Hughes, Heinz Wagner, E. Frazier Ward, Charles S. Rhea of the University Medical Center Department of Orthopedic Surgery, won the first place Aesculapius award.

Below, "Dissecting Aneurysm of the Ascending Aorta - Diagnosis and Surgical Therapy," by Drs. Jeff Hollingsworth, Henry Tyler, James L. Crosthwait, Quinton Dickerson, James C. Hays, W. Arthur Jones, George McMullan, Thomas D. Paine, William H. Rosenblatt, Mississippi Heart Institute-St. Dominic Hospital, won second place.



Awards, Presentations Highlight Annual Session

Educational scientific courses, stimulating speeches, active business meetings, entertaining social occasions, elections, exhibits and awards — always characteristics of MSMA's annual sessions — were again in evidence at the 111th Annual Session which was held last month at the Biloxi Hilton. This year's meet was marked by an unexpected and dramatic event, the successful rescue of a drowning victim by four of MSMA's members, prompting Thursday's House of Delegates to call for a resolution of commendation for Dr. J. Elmer Nix of Jackson, Dr. Kenneth Reed of Jackson, Dr. James V. Ferguson, Jr. of Greenwood and Dr. George Arrington of Meridian.

Dr. W. L. Jaquith was named recipient of the 1979-MSMA-Robins Award for Community Service. He was commended for his thirty years of service to the state in the field of mental health. Dr. Jaquith's accomplishments in obtaining funding of mental health projects were cited, and his successful efforts to organize mental retardation and mental health programs were recognized.

Dr. Norman Nelson, dean of the University of Mississippi School of Medicine, accepted from MSMA President Dr. Carl G. Evers a check in the amount of \$15,565.92. This grant, presented during Monday's House of Delegates meeting, represents 1978 gifts from Mississippi physicians and their spouses to the American Medical Association Education and Research Foundation.

Winners of the Aesculapius Awards, given to physician exhibitors for excellence of presentation, quality of content and originality, were named. First place went to Drs. James L. Hughes, Heinz Wagner, E. Frazier Ward and Charles S. Rhea of the Department of Orthopedic Surgery, University Medical Center, Jackson, MS. Second place was awarded to Drs. Jeff Hollingsworth, Henry B. Tyler, James L. Crosthwait, Quinton Dickerson, James C. Hays, W. Arthur Jones, George K. McMullan, Thomas D. Paine and William H. Rosenblatt, representing the Mississippi Heart Institute-St. Dominic Hospital, Jackson, MS.

Receiving winner's trophies for the tennis tournament were Mrs. Lamar Weems and Dr. Henry Tyler.

Opposite, Mr. Willard Duvall, representative of the A. H. Robins Company, displays the MSMA-Robins Award for community service which was awarded to Dr. W. L. Jaquith of Whitfield. Seated at right is Dr. Walter Rose, vice speaker of the House.

Saluron® • Salutensin® • Salutensin-Demi™
 (hydroflumethiazide 50 mg.) (hydroflumethiazide 50 mg./reserpine 0.125 mg.) (hydroflumethiazide 25 mg./reserpine 0.125 mg.)

the family of antihypertensives completing the therapeutic pyramid

Cost

According to a recent study,¹ Salutensin® (hydroflumethiazide 50 mg./reserpine 0.125 mg.) was the most economical "step two" therapy...about $\frac{1}{3}$ the cost of a day's supply of thiazide + methyldopa or thiazide + propranolol.²

Dosage titration

Salutensin contains the recommended effective doses of both its components, requiring minimal titration.

Duration of action

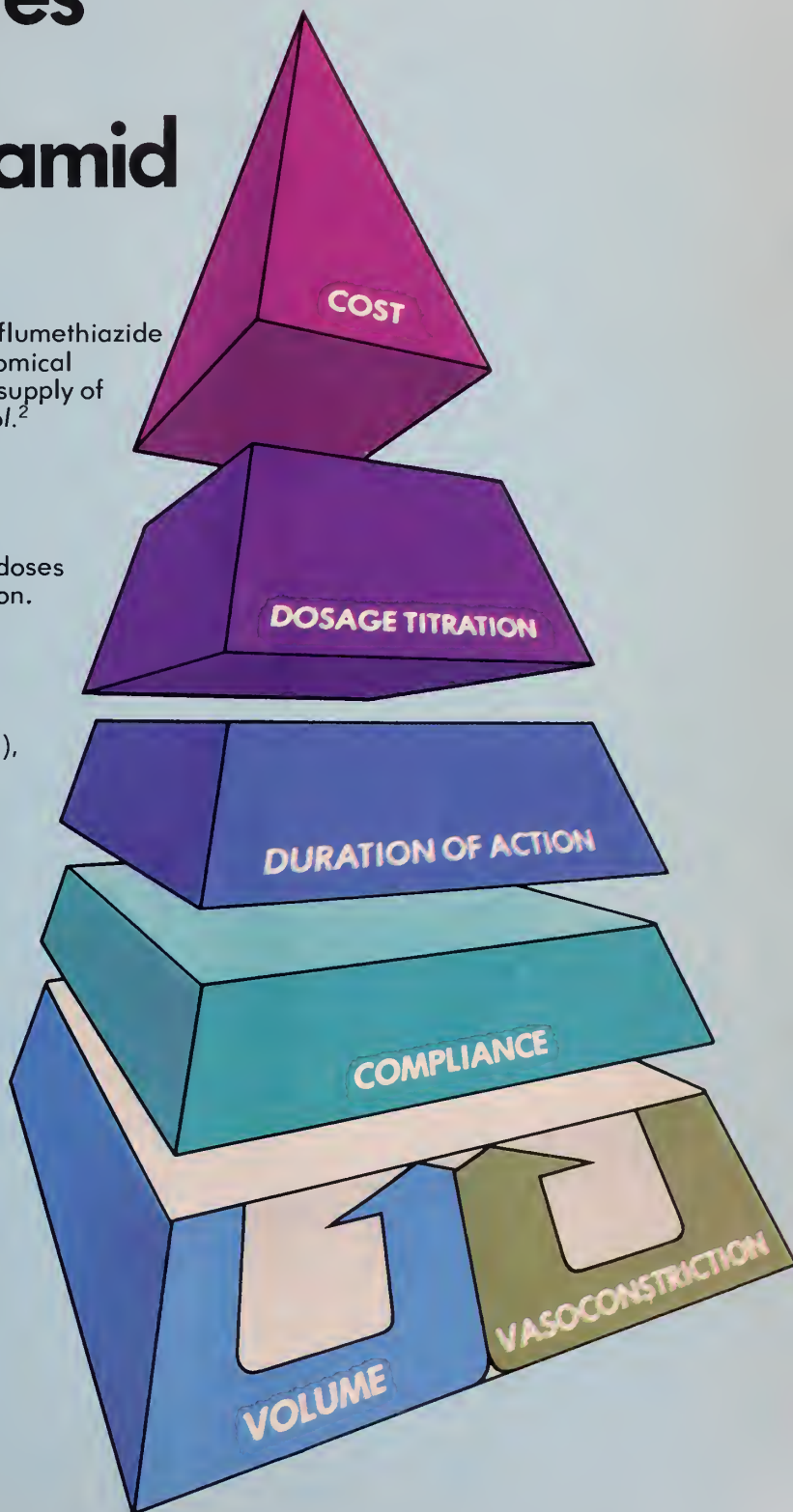
Salutensin contains Saluron (hydroflumethiazide), an intermediate-acting thiazide diuretic, which works over an 18-24 hour period, ideal for once-daily therapy.

Compliance

The total daily dose can be given once a day. Compared with multiple-daily-dosage medications, the chance of a missed dose is greatly reduced.

Volume/vasoconstriction

At the foundation of "step two" hypertension therapy, control of both circulating volume and peripheral resistance can be effectively achieved with the combination tablet Salutensin one day at a time.



References: 1. Finnerty, F.A. et al.: Step 2 Regimens in Hypertension, J.A.M.A. 241:579, 1979.
 2. Red Book 1979.

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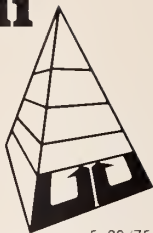
For a summary of prescribing information, please see following page.

Saluron® (hydroflumethiazide 50 mg.)

Salutensin® (hydroflumethiazide 50 mg./reserpine 0.125 mg.)

Salutensin-Demi™ (hydroflumethiazide 25 mg./reserpine 0.125 mg.)

structured for the
long run in "step two"
hypertension



5/20/75

Saluron® (hydroflumethiazide)

For complete information consult Official Package Circular.

CONTRAINDICATIONS: Patients with anuria, oliguria, or hypersensitivity to this or other sulfanamide derived drugs.

WARNINGS: Saluron should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Thiazides may be additive or potentiative of the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in pregnancy: Usage of thiazides in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing mothers: Thiazides cross the placental barrier and appear in cord blood and breast milk.

PRECAUTIONS: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased or unchanged. Latent diabetes mellitus may become manifested during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS:

A. Gastrointestinal system reactions: Anorexia, gastric irritation, nausea,

vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis.

B. Central nervous system reactions: Dizziness, vertigo, paresthesias, headache, xanthopsia.

C. Hematologic reactions: Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

D. Dermatologic-Hypersensitivity reactions: Purpura, photosensitivity, rash, urticaria, necrotizing angitis (vasculitis) (cutaneous vasculitis).

E. Cardiovascular reaction: Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates, or narcotics.

F. Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

USUAL DOSE: The average adult diuretic dose is 25 to 200 mg. per day.

The average adult antihypertensive dose is 50 to 100 mg. per day.

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

HOW SUPPLIED: Saluron (hydroflumethiazide 50 mg.): Bottles of 100.

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(12) 10/27/78

(hydroflumethiazide, reserpine antihypertensive formulation)

For complete information consult Official Package Circular.

WARNING

This fixed combination drug is not indicated for initial therapy of hypertension. Hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension is not static, but must be reevaluated as conditions in each patient warrant.

CONTRAINDICATIONS: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

WARNINGS: Small-bowel lesions (abstriction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients.

Use in pregnancy: Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

PRECAUTIONS: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss may cause digitalis intoxication. Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or bronchial asthma and in those with a history of peptic ulceration or bronchial asthma: in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being pre-diabetic should be kept under close observation if treated with this agent.

ADVERSE REACTIONS: Hydroflumethiazide: Skin-rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. **Reserpine:** Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares.

USUAL DOSE: 1 tablet b.i.d.

HOW SUPPLIED: Salutensin (hydroflumethiazide 50 mg., reserpine 0.125 mg.): Bottles of 100 and 1000.

Salutensin-Demi (hydroflumethiazide 25 mg., reserpine 0.125 mg.): Bottles of 100.



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Upper left, Dr. Gerald P. Gable, right, is administered the official oath of office by Board Chairman Robert S. Caldwell, at left. MSMA Executive Secretary Charles L. Mathews holds the historic association Bible. Above, the James Grant Thompson Memorial Past President pin is presented to Dr. Evers by Mrs. Thompson.

Members of the Fifty Year Club, in photos below, participated in their annual luncheon meeting. Past presidents of the association, shown in photos at left, enjoyed a traditional breakfast.



Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

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All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

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In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*



Dr. William C. Gates of Columbus, at left, and Dr. W. Joseph Burnett of Oxford are newly elected members of the Board of Trustees. They will represent Districts 2 and 3. Dr. Arthur A. Derrick of Durant was named Chairman of the Board.

Board of Trustees Names 1979-80 Officers

The Board of Trustees, the association's governing body, has two new members. Dr. W. Joseph Burnett of Oxford and Dr. William C. Gates of Columbus were elected to represent Districts 2 and 3 during Thursday's House of Delegates meeting at the recent 111th Annual Session. Dr. Whitman B. Johnson of Clarksdale was re-elected trustee of District 1.

Dr. Arthur A. Derrick of Durant, District 4, was elected chairman of the Board. Dr. Sidney O. Graves of Natchez, District 8, was named vice chairman. Re-elected to the post of Board secretary is Dr. Paul H. Moore of Pascagoula, District 9. The chairman, vice chairman and secretary make up the Executive Committee.

Continuing to serve on the Board are Drs. Ellis M. Moffitt of Jackson, District 5; James O. Manning of Jackson, District 5; Joe S. Covington, Meridian, District 6; and W. Boyce White of Laurel, representing District 7; Gerald P. Gable of Hattiesburg, association president; and Carl G. Evers of Jackson, immediate past president.

Six general officers meet with the Board: president-elect, secretary-treasurer, speaker of the House of Delegates, vice speaker and the two AMA delegates.



Mr. Bob Montgomery, legal counsel for the Mississippi Medical Fraternal and Educational Society, and Dr. C. G. Sutherland, seated at right, were speakers for the Society's annual meeting.



Members of the panel for the Section on Preventive Medicine included, from left, Dr. Doyle P. Smith, Dr. Nina Moffitt, Dr. Frank J. Morgan, all of Jackson, and Dr. G. Douglas Talbott of Smyrna, GA.



Officers of the Section on Ob-Gyn are, from left, Dr. Kenneth Pittman of Jackson, outgoing chairman, Dr. Lamar Gillespie of Hattiesburg, newly elected chairman, and Dr. W. L. Kahlstorf of Tupelo, secretary.



Officers of the MSMA Auxiliary include, from left, Mrs. John Estess, first vice president; Mrs. J. Stewart Williford, recording secretary; Mrs. Curtis Roberts, president-elect; Mrs. Jim C. Barnett, president; Mrs. Doyle P. Smith, treasurer; Mrs. Stanley Hartness, third vice president; and Mrs. James B. Martin, second vice president.

Below, Mrs. Jim C. Barnett of Brookhaven, 1979-80 president of the MSMA Auxiliary, outlined the auxiliary's programs during the Monday session of the House of Delegates.



Officers of the Mississippi Urological Society are, from left, Dr. Ronald Brown of Gulfport, secretary; Dr. Stanley Wade of Meridian, president-elect; and Dr. Lucas O. Platt of Tupelo, president. Drs. Platt and Brown will serve as officers of the MSMA Section on Urology.

MSMA Auxiliary Holds 56th Annual Session

The general meeting of the Mississippi State Medical Association Auxiliary's 56th Annual Session took place on Tuesday, May 8, at the Broadwater Beach Hotel in Biloxi. Mrs. Jim C. Barnett of Brookhaven was installed as president, succeeding Mrs. G. S. Rowlett of Vicksburg. Mrs. Curtis Roberts of Brandon was named president-elect.

Other officers elected were Mrs. John Estess of Hollandale, first vice president; Mrs. James B. Martin of Ocean Springs, second vice president; Mrs. Stanley Hartness of Kosciusko, third vice president; Mrs. Ben Martin of Columbus, fourth vice president; Mrs. Jack Atkinson of Brookhaven, corresponding secretary; Mrs. J. Stewart Williford of Hattiesburg, recording secretary; Mrs. Doyle P. Smith of Jackson, treasurer; Mrs. Robert Surratt of Jackson, assistant treasurer; and Mrs. Curtis Caine of Brandon, parliamentarian.

Special guests attending the auxiliary meeting were Mrs. Hoyt D. Gardner, first vice president of the AMA Auxiliary, Mrs. Baxter Troutman of Lenoir, NC, president of Southern Medical Auxiliary, and Mrs. Margaret Clements of the Georgia Medical Auxiliary.

Special activities during the three-day meeting were a Gumbo Demonstration on Wednesday and Monday's AMA-ERF Benefit, a Plant Care Demonstration.

Convention chairman was Mrs. I. C. Knox, Jr., of Vicksburg. Assisting were Mrs. James B. Martin of Ocean Springs, registration; Mrs. Curtis Roberts of Brandon, welcome booth; Mrs. Jerry T. Russell and Mrs. George E. Abraham of Vicksburg, luncheon; Mrs. Milam S. Cotten of Hattiesburg, coffee; Mrs. Ben H. Buchanan, of Tupelo, hospitality; Mrs. J. Edward Hill of Hollandale and Mrs. William Bowlus of Jackson, hostesses; Mrs. Gerald Wessler of Gulfport, tour chairman; and Mrs. John Estess of Hollandale, publicity.



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***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily. Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

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20 mg q.i.d. recommended dosage

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Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema.

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa with possible gastric discomfort, nausea and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100. Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

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Dr. Clyde A. Watkins of Jackson, right, was elected chairman of the Section on Preventive Medicine. At left is Dr. Thomas E. Waller of Starkville, secretary.



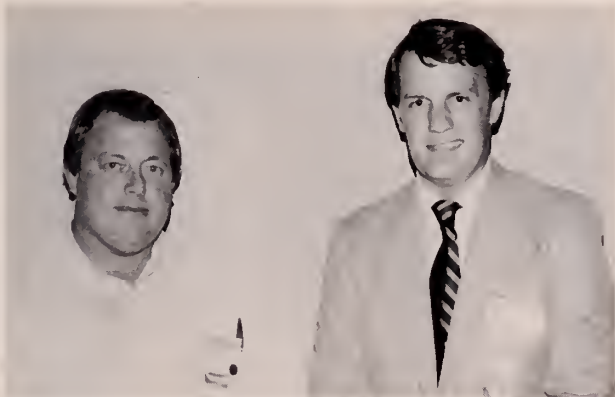
New chairman of the Section on Psychiatry is Dr. Glen Anderson of Brandon, left. Elected section secretary is Dr. Julius Collum of Jackson.



Dr. Homer Horton of Tupelo, right, was elected chairman of the Section on Anesthesiology. Dr. David Carlson of Jackson, is secretary.



Dr. Thomas C. Garrott of Biloxi, left, was named president-elect of the Mississippi Dermatological Society. President is Dr. John A. Marascalco of Greenville, center. Dr. Donald F. Barraza of Natchez, right, is secretary.



Dr. David Steckler of Natchez, left, will serve as treasurer for the Mississippi Pathologists Association, and Dr. T. G. Puckett of Hattiesburg, right, is secretary. Not pictured is Dr. William B. Wilson, president.



The American Academy of Facial Plastic and Reconstructive Surgery, Mississippi Chapter, elected new officers. Dr. Joe Burnett of Oxford is president; vice president is Dr. William Austin of McComb, left. Dr. J. George Smith of Jackson, right, is secretary.



Chairman of the Section on Family Practice is Dr. James O. Stephens of Magee, above left. Dr. Robert L. Buckley of Columbus, right, was elected chairman of the Section on Pediatrics. Pictured below is Dr. James Q. Sones of Jackson, new chairman of the Section on Medicine.



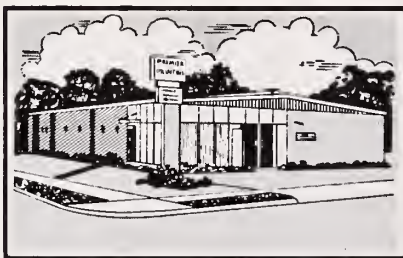
Dr. Henry J. Sanders of McComb, right, was named chairman of the Section on EENT. Pictured with him is Dr. W. Joe Burnett of Oxford, section secretary.



Officers of the Section on Radiology are Dr. William Pontius of Ocean Springs, chairman, and Dr. Sandra Rhoden of Jackson, secretary.

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Mrs. James Grant Thompson, left, was hostess for a party given in honor of Dr. and Mrs. Evers. Mrs. Evers is at right.

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AMERICAN BORN and educated family practitioner wanted to associate with same in Dade City, FL. This is a west central Florida community of approximately 6,000 with a drawing area of 40,000 and is 40 miles from Tampa and the Gulf. Prefer young, married physician interested in practicing good primary medicine with readily available specialist backup. OB can be your choice. Weekend emergency room coverage furnished with weekdays rotated among congenial hospital staff. Contact: Carl Graves, M.D. (UMC '72); 1570 Fort King Rd., Dade City, FL 33525. Telephone: office (904) 567-1906; home (904) 567-0776.

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IN CONCLUSION

The University of Texas M.D. Anderson Hospital and Tumor Institute reports that more than 200 cancer patients have their bone marrow stored in the hospital's "bone marrow bank." Eighty percent of them are leukemia patients. When their cancer first disappears, the patients donate bone marrow cells in the event the cancer returns. Autologous transplants, far more successful than donor transplants, were made possible with the development of the technique for freezing bone marrow cells, permitting them to be stored for up to three years.

The Mississippi State Board of Health reminds physicians that Varicella-Zoster Immune Globulin (VZIG) is available for immunodeficient children exposed to chickenpox at no cost through the Division of Clinical Microbiology, Sidney Farber Cancer Institute, 44 Binney Street, Boston, MA. Since VZIG is still an investigational drug and its supply is limited, several criteria have been established for release. Certain patients less than 21 years old may fulfil the criteria. The request for treatment must be initiated within 72 hours of exposure.

The largest selling insecticide in the world, toxaphene, has been found to cause liver cancer in male and female mice, according to a report by the National Cancer Institute. Test results also suggested the compound causes thyroid cancers. About 85% of toxaphene is used on cotton crops; other major uses include treating cattle and swine. Toxaphene, under study by the Environmental Protection Agency for the past two years for causing bone changes in wildlife, is also used for such food crops as soybeans, lettuce, corn, wheat, peanuts and tomatoes.

An annual report on the nation's health, released by HEW, shows record achievements in 1976. The death rate for coronary heart disease fell nearly 28% between 1968 and 1976. Life expectancy for a person born in 1976 is 72.8 years, compared to 72.5 a year earlier. Infant mortality in 1976 was 15.2 per 1,000 live births, compared to 16.1 a year earlier. The cancer death rate for people under age 45 dropped from 21.8 per 100,000 in 1950 to 14.7 in 1976. The report was compiled by the national centers for health statistics and health services.

A new personal medical record system, the MH medallion, is announced by Medical History, Inc., 521 Fifth Ave., New York, NY 10017. Available on a neck chain, bracelet or stick pin, the medallion contains a microfilm insert which emergency personnel can read with any standard magnifying device or microfilm viewer. Besides serving as an alert system for hidden medical conditions, the medallion may have special benefit for joggers, children and others who may not always have wallet and identification with them at the time of emergency.

Before prescribing, please consult complete product information, a summary of which follows:

The effectiveness of Valium (diazepam) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

ORAL: Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication, abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE: To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given, do not use small veins, i.e., dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest, concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status.

Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence, can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), i.e., phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

INJECTABLE: Although promptly controlled seizures may return, readminister if necessary, not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures, use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

INJECTABLE: Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

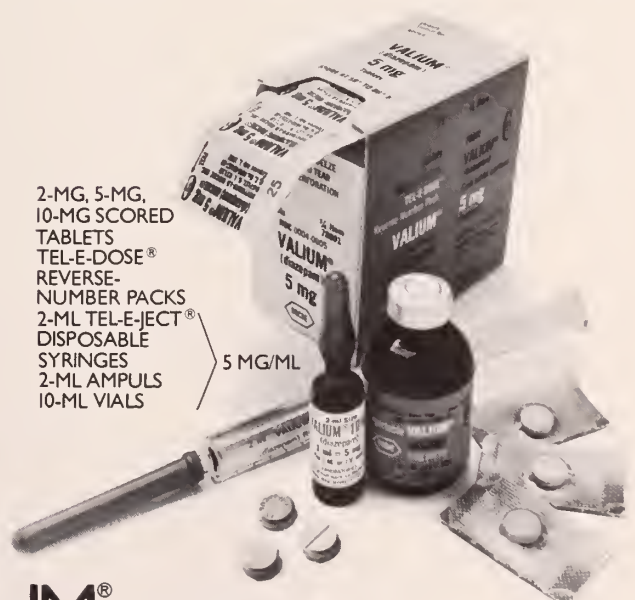
In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure, employ general supportive measures, IV fluids, adequate airway. Use levarterenol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects. Dialysis is of limited value.

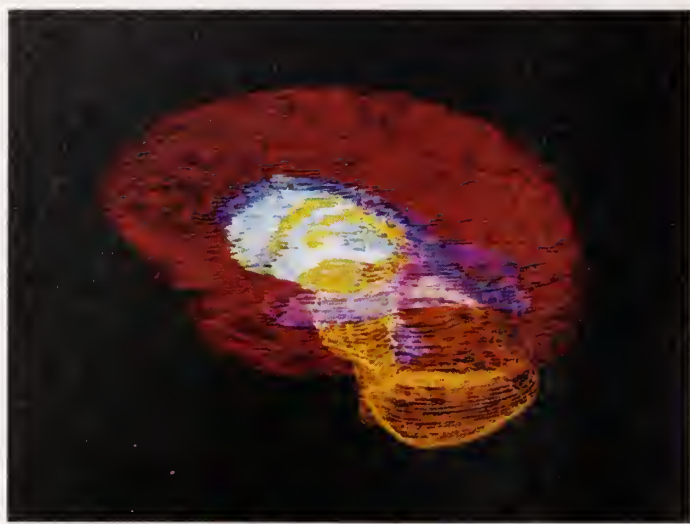
Supplied: Tablets, 2 mg, 5 mg and 10 mg, bottles of 100 and 500; Tel-E-Dose® (unit dose) packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10. Prescription Paks of 50, available singly and in trays of 10. Ampuls, 2 ml, boxes of 10. Vials, 10 ml, boxes of 1, Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 15% benzyl alcohol as preservative.



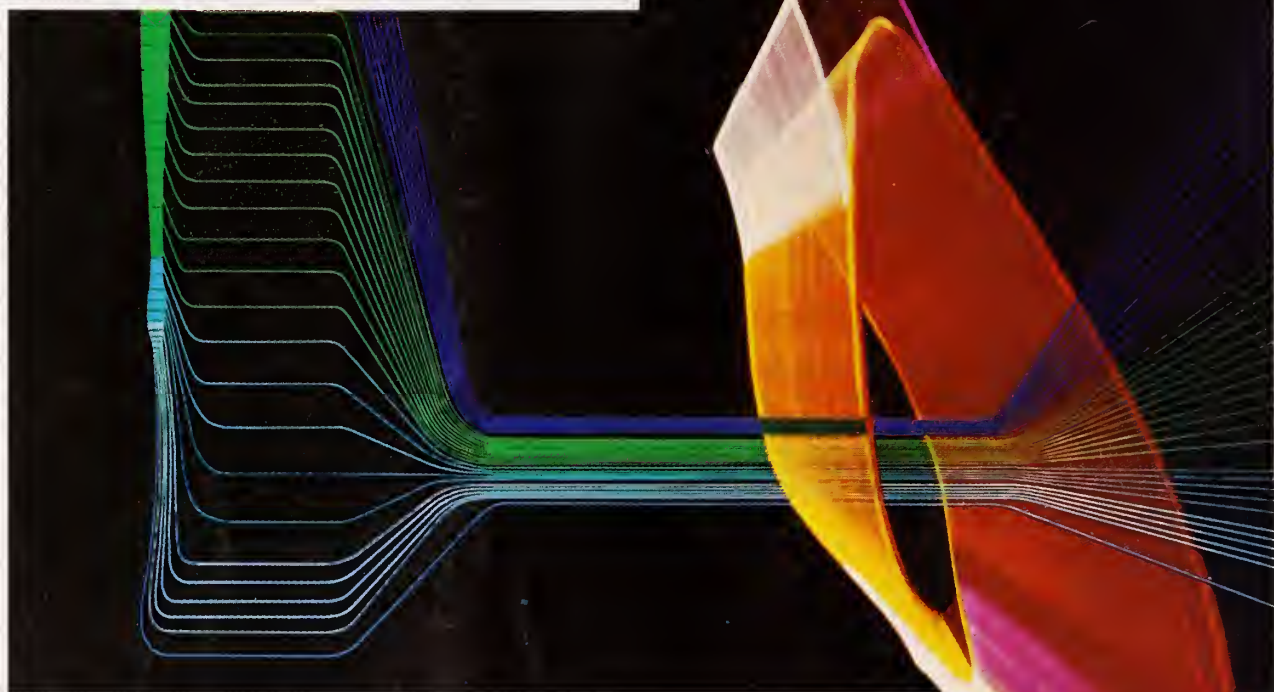
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Journal of the
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(ISSN 0026-6396)

Contents:

Antibiotic-Associated
Diarrhea

Radionuclide Flow
Study in Carotid
Vascular Disease

Address of the
President



A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10. Prescription Paks of 50, available singly and in trays of 10.



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AMA Awarded Grant to Improve Jail Health Care

The American Medical Association has been awarded a contract by the Law Enforcement Assistance Administration of the U.S. Justice Department to help bring adequate health care to the inmates of American jails.

The contract, which provides funding of \$1,296,460, specifies that the AMA will provide technical assistance to facilitate the widespread adoption of the AMA standards of health care in the nation's correctional institutions.

The standards are the result of a three-year AMA program which worked with selected jails in 16 states to upgrade their health care.

As a direct result of the program a comprehensive program of standards of jail health care was devised, under the supervision of a committee of experts, composed of law enforcement and correctional officers, lawyers, clergymen, physicians, nurses, ex-inmates, dentists and others. Using these standards a certification program has been developed and already 35 jails in the nine cooperating states have been certified as providing appropriate health care.

The implementation of the program at the state level was the work of state medical societies, using staff and the volunteer work of physicians.

Sportsmedicine Conference Is Set for August

The first U. S. Medical Games and Sports-Medicine Conference will be held at the University of Southern California, August 19-25. Physicians, dentists, podiatrists, physical therapists, pharmacists and veterinarians will compete in Olympic-style and non Olympic-style events, and will attend comprehensive seminars on sportsmedicine.

Sponsored by McGraw-Hill's Publication "The Physician and Sportsmedicine," the conference features general sessions on heat stress in sports, running injuries, nutrition for sports, and prevention and management of knee injuries. Concurrent group sessions will be conducted for the six disciplines. The courses set for physicians include management of ankle injuries, sports anemia, management of shoulder injuries and exercise-induced bronchospasm and asthma in athletes.

For more information, contact: McGraw-Hill Conference and Exposition Center, 1221 Ave. of the Americas, New York, NY 10022.

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NEWSLETTER

July 1979

Dear Doctor:

One of the health planners' "solutions" to medical care costs appears to be on the wane. Colorado recently repealed its hospital rate setting law because in the words of a legislative sponsor, "I am totally convinced that we have added costs to the consumer through this process." Colorado was one of nine states with mandatory rate setting laws which have been cited by the Carter Administration in support of its program for hospital cost controls.

Two other states with rate setting laws, Massachusetts and New York, are also reporting problems. The Massachusetts Hospital Association reports that 60% of the state's hospitals incurred deficits in 1976-77 and that regulation is costing \$60-80 million a year. New York reports 80% of its hospitals had \$1 million deficits in 1977.

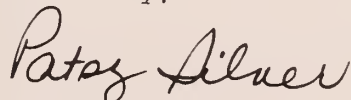
After receiving more than 100 complaints, FTC has launched an investigation into whether ophthalmologists and optometrists are violating the "Eyeglass Rule" requiring that patients be provided with a written prescription immediately following an examination. The FTC has authority to file suit seeking civil penalties of as much as \$10,000 for each violation of the rule, which went into effect July 13, 1978.

Two paramedic motorcycle units - believed to be the first in the country - are in use in Northfield, IL. The specially outfitted Kawasaki 400's were chosen for use on an expressway under reconstruction and therefore difficult for regular emergency vehicles to negotiate. Each motormedic unit carries two saddlebag trauma kits, and can maintain telemetry and radio contact with trauma center emergency physicians.

Eighty-four percent of the public feel private doctors limit their demands for personal information, more so than any other public or private sector organization, according to a recent Lou Harris study. Seventy-five percent of the public believe that doctors are doing enough to safeguard confidentiality of personal information. Some physicians (30%) feel they should do more to safeguard patient records.

A 1979 Arkansas statute provides for financial assistance to physicians who establish practices in family medicine in rural areas. The grant of \$6,000 per year for up to five years is available to physicians who choose to practice family medicine in a community of 7,500 persons or fewer, and in an area that is declared medically deprived by the Department of Health, Education and Welfare.

Sincerely,



Patsy Silver
Managing Editor

Carter's Hospital Containment Flounders

The Carter Administration's legislative proposal to place an arbitrary cap on hospital costs is floundering about in the Congress despite extreme pressure on the part of White House and Health, Education and Welfare Department lobbyists to put it back on the track. Top officials have publicly conceded that the President's bellweather anti-inflation proposal aimed at the guts of the nation's health care system may well be doomed.

The President has said that "he has not given up as far as getting the hospital cost containment measure implemented by congressional action."

Five months into the congressional session, the top priority bill had advanced through two subcommittees, but through none of the four full committees that have jurisdiction. The only committee "safe" for passage is the Senate Human Resources Committee where Sen. Edward Kennedy (D-Mass.) usually gets his way on health legislation.

Although the Health Subcommittee of the House Ways and Means Committee has adopted the measure, the situation in the full Committee is "touch and go." Chairman Al Ullman (D-Ore.), a supporter of the bill, wanted a vote but was forced to postpone a showdown indefinitely because there were not enough votes to assure approval.

On the other House health panel — Interstate and Foreign Commerce — the Health Subcommittee headed by Rep. Henry Waxman (D-Calif.) appears to be stacked against the bill despite Waxman's support. The situation in the two committees caused House Speaker Thomas P. O'Neill (D-Mass.) to put off his deadline for floor action on the measure from July to September.

The only strong voice for the Administration's hospital bill has come from the Administration. Labor has been lukewarm in its backing. Countering White House pressure has been the urgent protests of hospitals and physicians from every congressional district against the Administration plan. Congress, long hostile to wage and price controls, is not convinced there would be the price savings the Administration claims.

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Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle, the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdose. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSEAGE: Manifestations of acute overdose include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdose.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M. T. O'Dillon, R. H., and Leyland, H. M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

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B-3921 (Y578A)

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complications can develop*.
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A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

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*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

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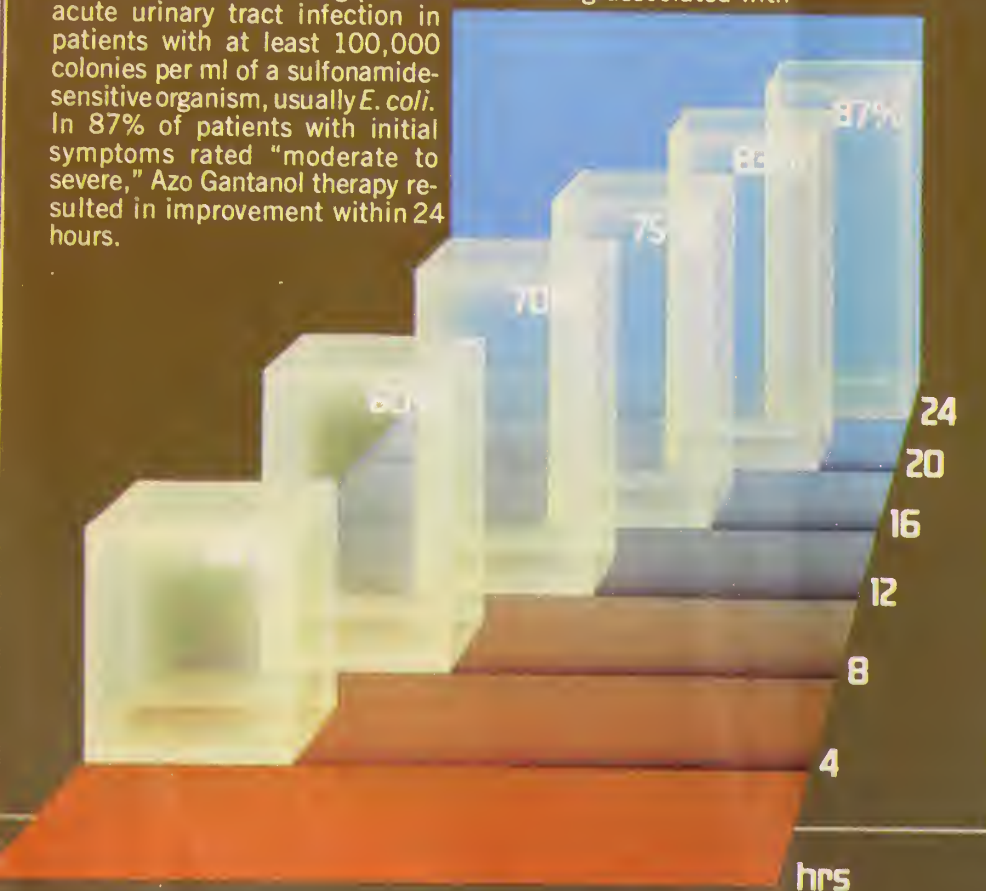
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the pain

for
the pathogens

data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows:
Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

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Results of Immunization Law Enactment Are Reported

The final reports from all private and public schools in the state indicate that 98.9% of students are in compliance with the school immunization law enacted by the legislature in 1978.

Dr. Durward Blakey, director of the Bureau of Disease Control of the Mississippi State Board of Health, stated that school officials, members of the private medical care sector, volunteers and health department personnel should be commended for their efforts to ensure compliance. He also commended the citizens of the state for their cooperation in accepting the required immunizations.

The requirement of a certificate of immunization will be extended through grade 10 this fall and through grade 12 the following year.

Dr. Blakey reminds that there remains the potential for outbreaks of measles and rubella in high schools due to the number of students not previously immunized and exempted from vaccination due to being older than age 11. "With the recognized failure rate with measles or rubella vaccine of up to 5% in the most controlled settings, it can be expected that a number of previously immunized students will experience rubella or measles during such outbreaks," he said. The State Board of Health encourages serologic testing and reporting of all suspect cases.

Controversy Stirs Anew in MHSA

The Mississippi Health Systems Agency, Inc. (MHSA), which has spent most of its existence in controversy, recently was the scene of another battle. This time the issue was the question, when does an elected board member become an elected board member?

According to newspaper reports in Jackson, the agency recently postponed implementing the election of what it calls subarea advisory council members until the current organizational members could elect new officers and approve \$21.4 million in new health projects. According to one interpretation, the agency changed its bylaws to permit the delay. According to the opposite interpretation, the change was illegal.

The controversy brought a program director to Mississippi from HEW's regional office in Atlanta to see if federal regulations had been violated.

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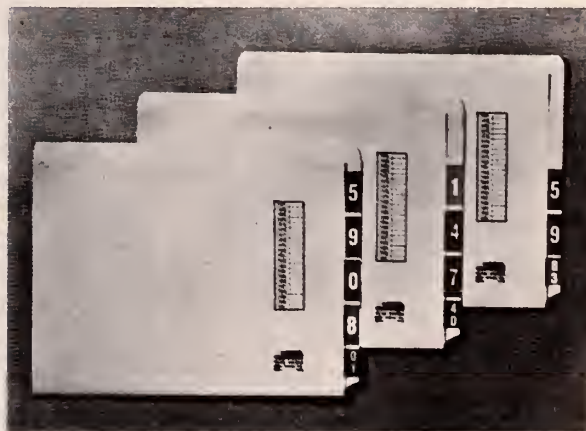


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Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies

before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

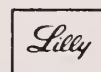
Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin.

(1021751)

*Equivalent to penicillin V.

Additional information available to the profession on request.



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DATELINE

Editorial Supports
MSMA's Suggestion

Jackson, MS - An editorial in "The Clarion-Ledger" supports MSMA's contention that better health education is increasingly important in improving public health, as stated in MSMA's recently-released Health Needs Study. The editorial concurred that a comprehensive statewide health education program, administered by a proper health agency and implemented "with the utmost haste," can begin saving lives and much pain, pending the establishment of additional recommended health improvement measures.

AMA Offers
Free Booklet

Chicago, IL - "Physician Fee and Cost Indicators," a booklet presenting methods to help individual physicians manage their practices more efficiently and restrain fee increases is available free of charge from AMA Order Dept., P. O. Box 821, Monroe, WI 53566. The booklet offers a dual system - the Physician's Fee Index and the Physician's Cost Index - for measuring the rate of a physician's fee increases against the CPI and other economic gauges, and for measuring the increase in a physician's expenses.

Mesh Cribs
Pose Threat

Evanston, IL - The use of certain types of nylon mesh cribs or playpens may result in serious injury to infants according to a report in the journal of the American Academy of Pediatrics. The article cited the case of an 11-month old girl who suffered neurological damage when a button on the back of her dress got caught in the nylon mesh of her crib. Parents should be advised of the danger, the article concluded, noting that the U.S. Product Safety Commission safety regulations do not cover mesh cribs.

Crises Affect
Blood Banks

Washington, DC - The newsletter of the American Association of Blood Banks, studying effects of natural or manmade disasters on blood banks, concluded that most blood centers have crisis plans to activate in the event of a disaster. The Miss. Regional Blood Center in Jackson, finding its blood supply low during the recent flooding situation, telephoned regular donors and provided a shuttle service. Transportation difficulties and a sharp drop in available donors were major problems.

Laetrile Ban
Continues

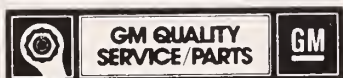
Washington, DC - The Supreme Court ruled recently that the federal government may continue to ban laetrile. The ruling eliminates the legal use of laetrile unless the federal Food and Drug Administration gives its approval, which is unlikely. Mississippi was one of 20 states to reject a laetrile bill during 1978. Of the some 20 states which had already passed laetrile laws, most had provisions to decriminalize the prescription of it by physicians, rather than to legalize the drug's use.

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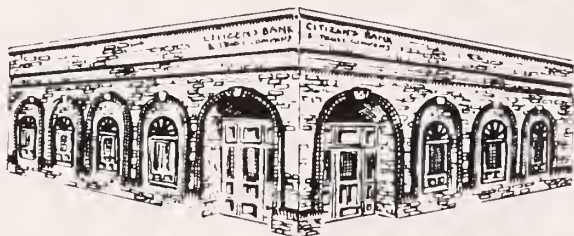
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EMS Division Submits Grant Proposal

The Emergency Medical Services (EMS) Division of the State Board of Health submitted to the Department of HEW a grant proposal for an amount exceeding \$1,000,000. If the application is approved, the North Mississippi EMS Authority will receive \$638,000 for the purpose of expanding its EMS program to include advance life support services for its 13-county region.

Under the proposal, the North Mississippi Authority would also receive \$215,000 from the Appalachian Regional Commission for related EMS purposes. Another part of the application would provide approximately \$60,000 to the Southwest Mississippi EMS Authority for the purpose of developing plans to enter advanced life support programs during 1980. The remaining portion of the grant would provide funds to the Division of EMS for continued state coordination of regional EMS activities.

HEW Attacks Alcoholism

The Carter Administration has opened an expanded attack on alcoholism with \$22 million for training, prevention and treatment.

"The major new Administration initiative" was announced by HEW Secretary Joseph Califano in a speech before the National Council on Alcoholism.

Expressing President Carter's commitment, Califano said, "it is time to prove to the American people that alcoholism is not only a treatable disease, but a beatable disease."

"The veil of shame and denial that once hung over the disease of alcoholism is lifting," said Califano. "More and more courageous Americans — from Betty Ford to Wilbur Mills to Harold Hughes — are standing up and saying, 'I have suffered from this disease, and I am recovering.'"

HEW plans to focus special attention on alcohol problems of teenagers, women, and pregnant women.

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The clinical program incorporates a wide range of modern psychiatric ideas. Emphasis is placed on interpersonal relationships, small group functions, and professional individualized care.

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For additional information contact: John R. Reedy,
Executive Director.

Riverside Hospital

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Telephone: (601) 939-9030



FTC Hits MDs on Blues

The Federal Trade Commission staff has proposed that physician membership on Blue Shield boards be slashed back. After a three-year study, the staff concluded that physician control of local Blue Shield boards may violate the antitrust laws and boost medical costs.

A long legal and procedural process lies ahead before any formal governmental action is possible. The rule-making proceeding recommended by the staff, which must be approved by the FTC, would be the first such action by the FTC in an antitrust issue.

Walter McNerney, president of Blue Cross and Blue Shield Associations, said the FTC's proposed regulation is "unnecessarily costly to America's taxpayers, potentially harmful to Blue Shield subscribers and factually unsupportable."

The FTC staff claimed in a 409-page report that physicians control decisions concerning payment to physicians, and coverage or benefits, in most of the nation's 70 Blue Shield plans. As of 1978, physician organizations selected the majority of members of the governing boards of 32 plans, and physician-controlled committees supervised or participated in

decisions about payments and claims in 67 plans.

The staff concluded that some form of medical participation in control of Blue Shield and other plans may be illegal as violations of the antitrust laws or as unfair conflicts of interest.

"Medical control of a plan means that physician organizations set or strongly influence the prices that their members will be paid by the plan," the report says.

In Mississippi the Blue Cross-Blue Shield Plan's Board of Directors is composed of 25 members, 6 of whom are physicians.

EMS Names Advisory Council Appointees

The Emergency Medical Services (EMS) Division of the Mississippi State Board of Health has announced the appointment of nine new members to the state EMS Advisory Council.

Richard J. Field, M.D. of Centreville will represent the Mississippi Trauma Committee. Robert Smith, M.D., Jackson, will represent the Mississippi State Medical Association. Pat Holloway, R.N., Amory, is the representative of the Mississippi Nurses Association. F. W. Ergle of Charleston has been named to the council, representing the Mississippi Hospital Association.

Jerry Barnes, EMT, Corinth and Don Swanson, EMT, of Hernando will represent operators of ambulance services. Fred Gaddis, mayor of Forest, James Travis, Panola County supervisor and Garlon Maynor, mayor of Water Valley will represent officials of county or municipal government.

The Mississippi EMS Act of 1974 provides for an EMS Advisory Council appointed by the governor of the state. The new members represent the second full EMS Advisory Council to be appointed since the initiation of the EMS Act. Spokesmen for the EMS encourage communication with the council members regarding the state EMS program.

New PMA President Is Named

Lewis A. Engman, a former chairman of the Federal Trade Commission, will become president of the Pharmaceutical Manufacturers Association on July 1. He succeeds C. Joseph Stetler, who retired after 14 years as head of the PMA.

Engman, 43, was FTC chairman from 1973 to 1976. Prior to that he had served on the President's Commission on Consumer Interests, the Office of Consumer Affairs, and the Domestic Council.

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In Appreciation

The many fine technical exhibitors who participated in the exhibit during the recent Mississippi State Medical Association 111th Annual Session are deserving of our recognition and a hearty "Thank You!" Not only did the presence of these exhibits enhance the educational quality of our meeting, but the support provided by our exhibitors is essential to the continuance of our traditionally outstanding scientific program.

The firms listed below participated in our 1978 annual meeting exhibit and we voice a collective expression of our sincere appreciation. May we also suggest that you retain this listing and express your personal appreciation when their representatives call upon you.

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AMA Schedules Leadership Conference

The American Medical Association's joint seminar on medical staff leadership and conflict resolution is scheduled for Aug. 27-Sept. 1, 1979, at the Wentworth Hotel in Portsmouth, NH.

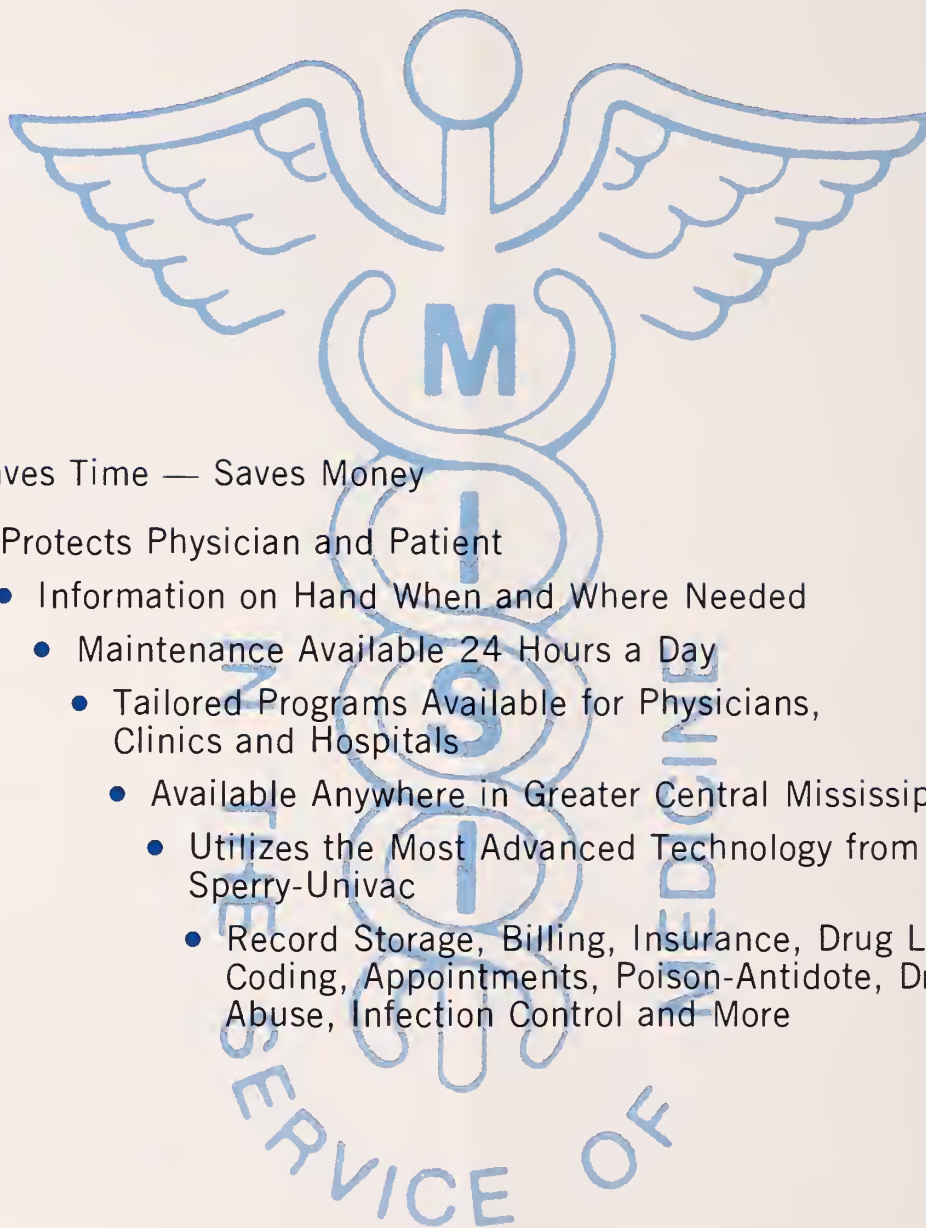
Using the theme "Leadership — An Essential Skill; Negotiation — A Necessary Art," the conference will focus on the special problems of medical staff members, including management problems, staff disputes, bylaws conflicts, contracts for service and relations with health planning agencies.

The six-day course meets the criteria for 38 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

Registration fee is \$450 for AMA members and \$550 for nonmember physicians. For information, write to the AMA Department of Negotiations, 535 N. Dearborn St., Chicago, IL 60610. Attendance will be limited, and registrations will be accepted on a first-come, first-served basis. Preregistration is recommended.

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and JAMES L. ACHORD, M.D.

Jackson, Mississippi

DIARRHEA is only one of several distressing symptoms that frequently accompany antibiotic administration. Indeed, the incidence of some alteration in GI function, as reported by patients, runs from less than 1% for some (such as tetracycline) to 16% for ampicillin¹ to 58.6% for clindamycin.² These symptoms, many of which may be lost in the dominant symptoms for which the drug is given, include anorexia, nausea, vomiting, epigastric distress, bloating sensations, loud borborygmi, abdominal cramping, loose or bulky stools and pruritis ani. These symptoms usually disappear within one to three days after stopping antibiotics and are independent of the dose, duration of treatment or route of administration.^{1, 2} At least for clindamycin, severe symptoms are associated with ages over 20 and female sex;² several authors have noted more frequent and more severe symptoms in patients with renal and/or liver disease.

While virtually any antibiotic can produce diarrhea and sometimes colitis, clindamycin seems especially prone to do so. Tedesco¹ found no cases of pseudomembranous enterocolitis (PMC) in 200 consecutive cases of ampicillin treated patients studied prospectively. The same author found a 10% incidence of colitis in 200 clindamycin treated patients;⁴ 21% had diarrhea, compared to 6.6% in the study of Swartzberg et al.¹

The mechanism of antibiotic associated diarrhea has been obscure. Multiple studies of ileal and colon aspiration as well as fecal studies in both human and animal subjects have demonstrated profound changes in bacterial flora. These studies all show a

Complications of antibiotic administration include diarrhea and pseudomembranous colitis (PMC). The author discusses diagnosis and treatment of these conditions.

marked reduction in the numbers of obligate anaerobes present as well as overgrowth by resistant staph, pseudomonas and/or fungi, especially *Candida*.⁵ No one has been quite entirely satisfied, however, that simply changing colon flora explained the syndrome. Beginning in 1977, several laboratories reported the presence of a cholera-like toxin in the stools of these patients, as discussed below.

It is clear that the formation of pseudomembranes is one of several nonspecific responses to injury shown by the intestinal mucosa, and is certainly not limited to antibiotic induced pseudomembrane formation. In the pre-antibiotic era, this condition was reported as a rather infrequent complication in severely ill or injured patients, most often following extensive surgical procedures, overwhelming infections, or in cases of extensive trauma. The one common etiologic factor in these early reports appeared to be ischemia. With the advent of broad spectrum

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antibiotics, further cases were reported in the absence of surgery or ischemia, and appeared to be related to an overgrowth of resistant, enterotoxin producing staphylococci (usually phage type 54) in the intestinal tract. This form of the disease, however, varies from the form usually seen today, in that the occurrence of the disease appearing to be dose related was much more common with an oral route of administration, and the small bowel was much more commonly involved than the colon, as is the case with pseudomembranous colitis associated with clindamycin or lincomycin.

As previously mentioned, the true incidence of "colitis" occurring with antibiotic administration is difficult to ascertain. With the introduction of lincomycin and its derivative, clindamycin, in the late 1960's, clinicians became aware of a sometimes fatal colitis, usually manifested by pseudomembrane formation which appeared to be linked to these antibiotics. What is clear, however, is that this condition can be linked to the use of almost any antibiotic if only the condition is looked for, and clindamycin and lincomycin, despite their reputations, are only two of many offenders.

Etiology

The etiological factors related to the disease have been recently clarified. Recent texts state that the cause is unclear, and while this may remain technically true, recent work has certainly clarified the etiology. Until 1977, three theories were advanced to explain PMC: (1) a direct toxic action of the antibiotic, (2) a change in intestinal flora and (3) superinfection by some unknown pathogen.

Larson et al⁶ were the first to isolate a heat labile toxin found in the feces of one patient with PMC. The feces was cytotoxic to cells in tissue culture at very high dilutions, and similar results were confirmed in four other patients with PMC. Further work by Rifkin⁷ and Larson⁸ showed the toxin to be neutralized first by a non-specific, polyvalent clostridial antitoxin and finally by antitoxin specific for *Clostridium sordellii*. Filtrates of the fecal contents were rapidly lethal to hamsters, but the disease could be prevented by antitoxin administration. Rifkin further showed that the disease could be prevented by the administration of vancomycin to the hamsters, and finally showed an excellent clinical response in one patient with PMC treated with vancomycin. Neither investigator was successful, however, in isolating *C. sordellii* from the stools of the animals or patients. Bartlett⁹ isolated a species of *Clostridia* from colitis-producing fecal extracts of hamsters.

The organism was resistant to clindamycin, sensitive to vancomycin, and was phenotypically similar in almost all respects to *C. difficile*. Cultures of this organism produced colitis in hamsters, as did injections of cell free supernatants taken from the cultures. Finegold¹⁰ was able to confirm the isolation of *C. difficile* from a patient with PMC and showed that the toxin produced by *C. difficile* could be neutralized by the supposedly specific *C. sordellii* antitoxin. This group proposed that *C. difficile* was the causative organism of PMC. Larson¹¹ duplicated this work in humans and hamsters and proposed that the antibiotics produce host susceptibility, perhaps by inducing a change in flora, allowing for colonization by *C. difficile*. This implies that PMC can develop only in a physiologically altered bowel, which explains the well-documented cases occurring prior to the antibiotic era and the sporadic clustering of cases occasionally reported. In addition to neutralization of the toxin by antitoxin and response of both animal models and patients to vancomycin, passive immunization with *C. sordellii* antitoxin has recently been shown to prevent the disease in test animals,¹² implying that active immunization may be a therapeutic possibility in the future.

The pathophysiology of cholera vibrio enterotoxin has been under study for some years. It is known to cause a marked increase in intestinal motility and an increase in vascular permeability but no histologic destruction of mucosal epithelium. In fact, the absorptive capacity is not decreased in mucosa exposed to *C. vibrio* enterotoxin; the massive stool volume results from a massive secretion of fluid from the bowel wall sufficient to overcome the finite absorptive capacity of the colon.

While the mechanism of other enterotoxins is not identical to that of *C. vibrio*, there are pertinent similarities. These include activation of adenyl cyclase which converts ATP to cAMP which is a frequent finding in diarrheal states experimentally induced. The role of prostaglandins, which also cause an increase in cAMP, is unknown.

All of this work would seem to indicate *C. difficile* is the causative organism of PMC. However, a toxin has been recently isolated from rabbit models of PMC which is not neutralized by *C. sordellii* antitoxin, but is neutralized by antitoxin to *C. perfringens* type E.¹³ This raises the possibility that several clostridial species are at least potential toxin producers in the antibiotically altered bowel. Secondly, at least one worker reports identification of viral particles in the mucosa and pseudomembrane of patients with PMC, suggesting the possibility of a "viral colitis."¹⁴

Characteristics

Grossly, PMC presents a characteristic appearance. When visualized through the proctoscope or at autopsy, multiple yellowish to white plaques ranging from 2 to 20 mm are seen. In severe cases these may coalesce, but generally the lesions are distinct. Copious amounts of thick, purulent mucus may completely obscure the plaques so that a careful examination is in order. The membrane can be removed with moderate difficulty, usually revealing a friable base with very superficial ulceration. The intervening mucosa is usually not ulcerated, but is edematous and hyperemic.

Microscopically, most biopsy specimens reveal the pseudomembrane to be composed of mucin, fibrin, white cells and necrotic mucosal cells.¹⁵ Occasionally a membrane is not identified microscopically despite its presence grossly, as the membrane is usually attached in only one to several places and may be dislodged before the specimen is fixed. Electron microscopy has shown the pseudomembrane to begin with the disappearance of the brush border of the mucosal cells and appearance of bizarre cytoplasmic processes on the luminal surface of the epithelial cells. Neutrophils migrate into the mucosal connective tissue and epithelium. These changes are very localized, and in these areas discrete ulceration occurs and infiltration by neutrophils increases. Fibrin is deposited in such areas, and necrotic cells are shed into the lumen. The neutrophils and fibrin are likewise exuded into the lumen where a fibrin network is formed, producing the pseudomembrane.¹⁴

Inflammation

The inflammation involves the lamina propria with moderate to severe inflammatory infiltrate being present in the typical case. The inflammatory cells may be a mixture of neutrophils, lymphocytes, and plasma cells or just lymphocytes. Occasionally, only neutrophils are present. Crypt abscess and thrombi in mucosal vessels are not considered typical, nor is true full thickness ulceration of the mucosa. Ulceration of the surface epithelium, as mentioned above, is characteristic. Glandular dilatation and goblet cell depletion have been reported with approximately equal prevalence. The submucosa appears to be involved by a mild, nonspecific inflammatory infiltrate in many cases, but quite often there is no evidence of submucosal involvement.

Incidence

The majority of clindamycin associated pseudomembranous colitis cases have occurred in

females; sex ratios that may be as high as 4:1 are reported.¹⁶ The disease occurs in all age groups, but is quite unusual below the age of 16-20 years, despite extensive use of the drug in pediatric practice. According to the manufacturer, clindamycin associated colitis occurs once in 50,000-100,000 courses (when considering the life threatening and lethal form of the disease).¹⁷ A retrospective analysis in the Dallas area placed the figures somewhat higher, approximately 1 per 5,000-10,000.¹⁷

The highest incidence is reported in the prospective study by Tedesco.⁴ Of 200 patients treated with clindamycin, a 21% incidence of diarrhea and a 10% incidence of pseudomembranous colitis was reported.

Clindamycin is the major antibiotic associated with colitis in most reviews, and most cases have pseudomembranes either proctoscopically or at autopsy. Most cases followed oral administration of antibiotics, but it has often been seen after parenteral therapy. The disease is apparently more severe if antibiotics are continued despite diarrhea. The frequency of stools is variable and may reach 30 per day. The stools are usually described as watery without gross blood. Patients may also exhibit nausea, abdominal pain and mild dehydration. Almost all patients have fever, and about half have leukocytosis. The diarrhea may last two to three weeks. The severe form of this colitis can be associated with severe abdominal pain, hypotension, hypoalbuminemia and electrolyte imbalance. Toxic dilatations may be seen and one case of migratory polyarthritis has been described.

Diagnosis

When antibiotics other than clindamycin are involved, proctoscopy is less crucial as the incidence of pseudomembranous colitis is much less. (Proctoscopy is indicated in any patient with diarrhea and a serious underlying illness, irrespective of antibiotic coverage.) The findings on proctoscopic exam are characteristic and have been previously described.

Plain abdominal films in severe pseudomembranous colitis are quite helpful and often show markedly edematous and distorted haustral markings, an increase in the overall thickness of the colon wall and moderate distention involving the entire colon. Less severe cases show no specific changes on plain abdominal films.

Barium enema is not usually needed to make the diagnosis and may be contraindicated. However, one can see barium outlines of the pseudomembranous plaques if the study is done.

Treatment

Antibiotic associated pseudomembranous colitis runs a variable course. Two important principles of treatment are early diagnosis and cessation of antibiotic therapy. It is not possible to distinguish between uncomplicated diarrhea and pseudomembranous colitis on the basis of symptoms, so early proctoscopy is essentially to diagnosis. Once the diagnosis is established, stopping the antibiotic is usually sufficient. The use of antidiarrheal agents such as diphenoxylate hydrochloride with atropine sulfate (Lomotil) is controversial. Lomotil has been shown to prolong the course of shigellosis. The major objection to use of antidiarrheals has been that they decrease the propulsive motility of the colon, thereby increasing the exposure of the colon to the toxin. However, the data suggesting the relationship of Lomotil with worsening of colitis are uncontrolled. Antidiarrheal agents do not shorten the course of the illness, but may have a place in the management of symptoms.

There is no evidence that steroids are beneficial in the usual case. Cholestyramine has been suggested as useful therapy but has not helped in many cases.

C. difficile is resistant to most antibiotics but (so far) is not resistant to vancomycin. Tedesco et al have demonstrated improvement in severe symptoms of antibiotic associated colitis when vancomycin is given orally.¹⁸ Vancomycin is now considered the drug of choice when pseudomembranes are seen on proctoscopic exam. In such diarrhea not associated with these pseudomembranes, no therapy or perhaps cholestyramine, which absorbs enterotoxin *in vitro*,³ is usually sufficient.

In very sick patients, surgical intervention may be necessary, requiring either diverting ileostomy or colectomy.

The overall mortality from this disease is about 15%. Most patients recover uneventfully. The most important recommendation that can be made is to use antibiotics judiciously.

Summary

Diarrhea and pseudomembranous colitis (PMC)

are well recognized complications of antibiotic administration. Though more frequently reported with lincomycin or clindamycin, these complications may be seen with almost any antibiotic in use today. Diarrhea generally responds to withdrawal of antibiotic therapy. PMC appears to be caused by a cytotoxic, heat labile enterotoxin produced by an overgrowth of one or more clostridial species. Proctoscopy provides a ready means of immediate diagnosis, and vancomycin therapy is indicated if pseudomembranes are present or the diarrhea does not promptly respond to drug withdrawal. Treatment with corticosteroids and/or cholestyramine is of no proven benefit. ★★★

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Radiologic Seminar CXCLII: Radionuclide Flow Study in Carotid Vascular Disease: Accuracy, Limitations and Pitfalls

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THE RADIONUCLIDE cerebral flow study, or radionuclide angiogram as it is frequently termed, has become an established procedure performed in conjunction with the static radionuclide brain scan. Utilization of the flow study has increased the sensitivity of radionuclide brain scanning as much as 33% in some series, and has increased its specificity by providing further information regarding lesions detected on the static scan.¹ This has been particularly helpful in the differentiation of cerebral infarct from neoplasm. Typical patterns exist for certain lesions including cerebral arterial occlusions, meningoma, AV malformation, and carotid-cavernous fistula. These patterns are excellently demonstrated in several reviews.^{2, 3}

The radionuclide flow study may also be quite helpful in the evaluation of carotid occlusion or stenosis. The purpose of this paper is to review our experience over the past several years based on the frequent utilization of the flow study and static brain scan prior to angiography in patients evaluated for suspected carotid vascular disease and to discuss certain limitations and pitfalls in interpretation.

Technique

Dynamic flow studies were performed using a scintillation camera with high resolution parallel hole collimator in an anterior position following bolus injection of 15 to 20 millicuries of 99m Tc-pertechnetate in a less than 2 cc volume. Injection was made into an antecubital vein followed by immediate flush injection of 20 to 30 cc of saline. Images were recorded at two second intervals and

study recorded on videotape which could subsequently be reviewed on the persistence oscilloscope.

Carotid arteriography was performed exclusively via catheter technique, usually from the femoral approach. Biplane filming of the head and neck and "spot" filming of the carotid bifurcation in AP and oblique positions were performed similar to the technique recently described by Yates in Radiologic Seminar CLXXXVIII, JOURNAL MSMA. Estimation of the degree of stenosis was made based on combined evaluation of the multiple projections.

Carotid Occlusion, Stenosis and Ulceration

Typical findings indicative of extracranial or occasionally intracranial carotid occlusion or stenosis were frequently encountered with delayed or decreased flow in a portion or all of the region of the extracranial carotid artery or in a portion or all of the cerebral hemisphere (see Figures 1 & 2). This was

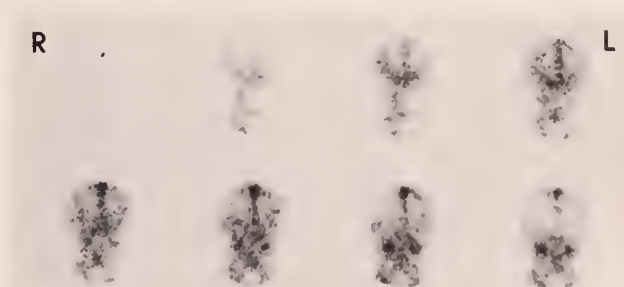


Figure 1. Radionuclide flow study demonstrates marked decrease activity in the left neck and delay in the left hemisphere in patient with complete left internal carotid occlusion. Delayed increase with "flip-flop" phenomenon is seen in left hemisphere from collateral filling.

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From the Department of Radiology, North Mississippi Medical Center, Tupelo, MS.



Figure 2. Marked decrease activity in distal left carotid region with delayed activity left hemisphere and increase activity in nasal area ("hot nose" phenomenon) in patients with marked stenosis proximal left internal carotid artery. Flow study repeated after endarterectomy was normal.

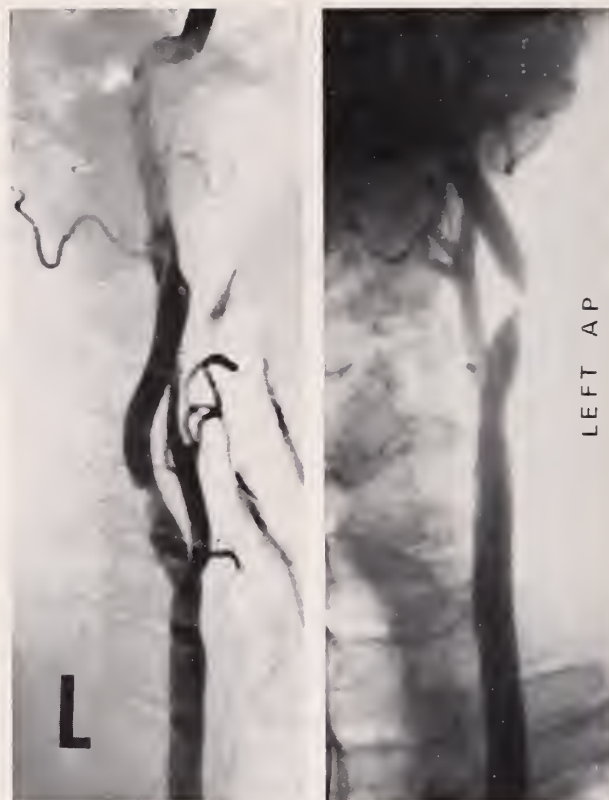
sometimes followed by a delayed increase in activity in the affected hemisphere as the "flip-flop" phenomenon, considered to result from delayed collateral flow. Such findings correlated extremely well in our experience with carotid or middle cerebral artery occlusion or significant stenosis with no known false positive exams.

Partial review of our experience performed two years ago and a recent update, however, demonstrated significant limitations in the evaluation of carotid disease by radionuclide flow studies. Flow studies were reviewed on 48 patients over several month periods found to have significant carotid vascular disease on angiography. The initial interpretation of the flow study was taken for comparison, although in retrospect several appear to show subtle early decreased activity without definite delay.

Radionuclide flow study detection rate of carotid stenosis of 50% or greater estimated cross-sectional area decrease or probable atheromatous ulceration was 42% for the study group of 48 patients. The detection rate increased to only 56% when the criteria for significant disease was increased to 70% estimated luminal cross-sectional area decrease or definite ulceration, frequently utilized criteria (see Figures 3A, 3B and 3C). In Cowan's review, an



Figure 3A. Normal flow study in patient with bilateral carotid stenosis.



Figures 3B and 3C. Arteriogram shows approximately 80% stenosis proximal left internal carotid. Mild proximal right internal carotid stenosis and moderate distal intracranial right carotid stenosis were also seen.

overall detection rate of 64% was reported for his series.¹ One complete occlusion out of 14 was missed in our series giving a detection rate of 93% for complete carotid occlusions (see Figure 4).



Figure 4. Flow study read as normal in right complete internal carotid occlusion. Questionable slight delay on left with marked stenosis left carotid.

Thus, the flow study may fail to detect more than one-third of significant carotid stenotic or ulcerative lesions. Perhaps quantitative analysis of time-activity curves may improve this detection rate as some suggest; however, we have found this to be of limited clinical utility when attempted.⁴ Review of the videotape playback on the persistence oscilloscope was more often helpful in subtle cases and perhaps routine use will improve the detection rate.

Improved camera sensitivity will help; however, certain limitations are inherent in the venous injection.

TABLE 1 RADIONUCLIDE FLOW STUDY

FALSE NEGATIVE R. N. FLOW STUDIES:

Bilateral significant stenosis	7
Ulceration without stenosis	6
Unilateral stenosis	3
Technically marginal	2
Basilar stenosis	1
TOTAL	19

Review of the false negative flow studies indicated that slightly more (37%) were due to the presence of bilateral carotid stenosis with moderate to marked involvement of the less severely involved carotid (see Table 1) than to the failure to detect atheromatous ulcerations occurring without significant stenosis (26%).^{2, 5} Of particular interest was the relatively high frequency in the study group of significant bilateral stenotic lesions (20%) and ulceration without significant stenosis (17%), a consideration which does not appear to be stressed in many of the reviews. Marked enlargement of collateral pathways or large vertebral arteries on the side of the carotid lesion appeared to contribute to the symmetric appearance of the flow study on occasion. Where the flow study was abnormal, there frequently appeared to be poor correlation with the severity of the process, as several instances of complete occlusion or marked bilateral stenosis and ulceration occurred with only slight abnormality demonstrated on flow study. The flow study, as expected, failed to detect vertebra-basilar disease in one case. Rarely, unsuspected CVA was demonstrated on the static scans in patients being evaluated for transient ischemic attack syndrome.

Ulcerations were frequently encountered; however, these were often associated with sufficient stenosis to alter the flow study. In several instances, ulcerations without significant stenosis were missed as would be expected. This is particularly significant, as some suggest that atheromatous ulceration is

the most frequent cause for the transient ischemic attack syndrome.

Pitfalls

Unilateral decreased activity on the flow study may occur in the presence of normal static brain scan images in lesions other than carotid stenosis or occlusion. These include acute infarction or intracranial hemorrhage (see Figure 5), arterial spasm secondary to subarachnoid hemorrhage or other etiology (see Figure 6), or subdural hematoma.⁶ Bilateral extracranial carotid disease may be demonstrated on the flow study by bilateral symmetric delay or decrease in the neck and hemispheres; however, this appearance may also occur with poor bolus injection or prolonged cardiac transit in congestive failure. Bilateral intracranial decreased flow may also be encountered in cerebral edema, increased intracranial pressure, bilateral middle cerebral artery occlusion, or in several of the above mentioned abnormalities. Brain death with absent internal carotid perfusion may appear similar but more pronounced; lateral displacement of middle cerebral artery activity by severe hydrocephalus may also be confusing. Typical patterns for many of these have been reported.

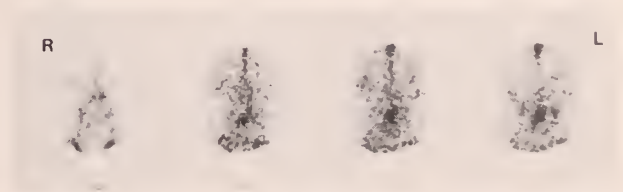


Figure 5. Abnormal decrease left hemisphere with delayed increase in acute left middle cerebral infarction. Initial static scan normal; repeat in one week showed flame shaped lesion on left.

Unilateral increased flow may be misinterpreted as decreased activity on the opposite side suggesting carotid decreased flow. This may occur in poorly defined vascular neoplasms, inflammatory lesions, AV malformations and skull or scalp lesions. Unilateral increase may occasionally be seen in subacute infarction as "luxury perfusion" corresponding to the changes seen on angiography.⁷ Cerebral arteriovenous dilatation with unilateral increased activity has also been described following seizure activity, possibly severe migraine headaches and on a developmental basis.⁸

Unilateral increased activity in the neck might occasionally be confusing. In our experience this has most frequently been encountered in apparent jugular venous reflux, most often following left arm

injection in a supine position.⁹ More focal increase may be seen in cervical adenitis or vascular lesions such as carotid body tumors. The increased flow patterns seen in vertebral artery steal syndrome and in carotid-cavernous fistula are also generally characteristic.

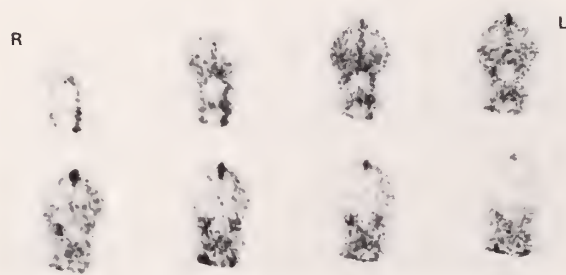


Figure 6. Unilateral decrease activity is seen in hemisphere in patient with subarachnoid hemorrhage from aneurysm.

Careful correlation of the radionuclide flow study with the clinical history, static scans and skull films frequently provides clarification of many of the above abnormalities and is necessary to avoid misinterpretation. Attention to specific details of timing and characteristics of the flow study may permit more exact diagnosis.

The "hot nose" phenomenon with marked increase in the nasal region during the flow study has been suggested as characteristic of carotid disease with collateral flow (see Figure 2). This has more recently been reported as occurring with greater frequency in patients receiving large doses of psychotropic drugs, especially the phenothiazines, possibly due to nasal vasodilation.¹⁰

Posterior lesions including posterior cerebral artery infarction, arteriovenous malformation, transverse dural sinus occlusion, or posteriorly situated neoplasm, may need radionuclide flow studies performed from the posterior projection for adequate evaluation. From a practical standpoint the flow study may be performed in the anterior projection for initial evaluation, and repeated the following day in a posterior or lateral projection if review of the clinical history or abnormality on the subsequent static scans indicates its desirability.

Summary

Radionuclide cerebral flow studies as an adjunct to the static isotope brain scan may be helpful in the

evaluation of carotid vascular disease and were frequently diagnostic in appearance in carotid occlusion or stenosis. Similar patterns may be encountered, however, on the basis of other etiology and this should be considered. Serious limitation in the detection rate was encountered, with a normal-appearing flow study occurring in more than one-third of significant carotid lesions, on review of our experience. Frequent failure to detect bilateral stenosis or the highly significant ulcerative lesion is of particular significance in the evaluation of the T.I.A. syndrome. Thus, a negative flow study by no means excludes the presence of significant and potentially correctable carotid vascular disease, and angiography remains indicated if stenosis or ulceration is suggested by clinical history and findings.

★★★

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Address of the President

CARL G. EVERS, M.D.

Jackson, Mississippi

AS I END MY YEAR as president of our professional association, many thoughts naturally come to mind.

To those of you who have warmly greeted Jan and me as we traveled over the state, we want you to know that your friendship and hospitality have meant a great deal to us. We shall never forget it.

To Sue Rowlett and the other officers of the auxiliary who have so ably served whenever called to do so, a special "thank-you" for a job well done.

This has been an eventful year for medicine. Even Mr. Califano recently had to admit that "Americans are among the healthiest people in the world."

Parenthetically, Mr. Califano then called for hospital cost controls and national health insurance. Apparently Mr. Califano doesn't believe in the old adage, "if it ain't broke, don't fix it." With the healthiest people and the best health care in the world, he and Mr. Kennedy especially advocate "let's tear it down and start over with a system already tried elsewhere and found lacking."

It has been a year of commitment and accomplishment on the part of many physicians to address those issues that besiege our profession.

It has also been a year when I have personally become more aware of the apathy and lack of concern among many in the profession.

I would like to talk to you today about both groups — the concerned and the unconcerned.

Let me begin by posing a question. The question is "Where will you be when the lights go out on the practice of medicine as we know it today?"

Your first answer might be "The lights aren't going to go out." And then continuing, you might say, "That's why I'm paying dues to MSMA, the AMA and all those other medical organizations — that's what they are for — to keep the lights on."

My response is that you are partially correct — *IF*. And the *if* involves how much more you are doing in these organizations over and above paying your dues.

President, Mississippi State Medical Association, 1978-79.

Read before the House of Delegates, 111th Annual Session, Biloxi, May 7, 1979.

A professor of marketing at a well-known university conducted an extensive study of professional associations. They were all individual membership associations such as ours.

He found that the membership of any professional association could be broken down into four groups.

One group, comprising about 10% of the members, devotes extensive time to the activities of the association. They are concerned, and to use the old marine corps description, "gung ho."

Another group, comprising about 30% of the members, is involved in the association's activities to some extent. They attend an occasional meeting. When asked, and told what to say, they will also write their congressman.

Then there is a group comprising about 50% of the membership who he labeled "checkbook members." These members unburden their professional consciences by paying dues with the caveat that "it's all yours, boys, I'm going to play golf," or tennis now-a-days.

Finally, there is 10% of the membership who he labeled as the "dissidents." To this group nothing is ever right.

I wouldn't presume to say that this membership formula fits our association. If it does, however, it would indicate that at least 50% of our members will be playing golf "when the lights go out on the practice of medicine as we know it today."

Commitment on the part of members of this association is perhaps best illustrated by two projects before you at this annual session.

One is the Health Needs Study. If I were asked to give a good example of what this association is all about with respect to its professional and public responsibilities, this project would be that example.

Each of us owes a debt of gratitude to the committee members who conducted the study. It will serve as a blueprint for action by our association in the years to come.

Let me cite just one example of what this action might be, based on your commitment.

PRESIDENT'S ADDRESS/Continued

The study recommends a more concerted effort on the part of MSMA and other concerned organizations to recruit physicians for practice in our state.

This is an opportunity for MSMA, the University of Mississippi School of Medicine, and the Mississippi Hospital Association to join with local public and private organizations in a physician recruitment effort.

One of the first things we need to do is to educate local organizations on how to recruit, and what is realistic and attainable.

The program is ready. We just need you to volunteer some time to implement it.

What are the potential outcomes for such an endeavor? Well, first of all, who better knows about physician recruitment needs than medical organizations?

Secondly, what better way is there for these medical organizations to demonstrate their concern for a deep public concern in our state?

And, finally, if we are worried about some of the proposed solutions for meeting the physician shortage in our state, and I know some of us are, then we had better come forth with solutions of our own.

A brief word now about another project which I believe illustrates the commitment and concern of some of our members.

If I had to give one good example of what this association is all about with respect to its commitment to the profession I would cite the Disabled Physicians' Program. You will recall that the House of Delegates directed implementation of this program last year.

That implementation has proceeded, and rather magnificently, thanks to the concern and interest of a committee of dedicated physicians.

The Disabled Physicians' Program is an outreach and advocacy program for that one-out-of-ten physician who will at some time have problems due to chemical dependency.

The program has already helped a significant number of our colleagues and their families, and patients. With your support and assistance it will continue to do so.

I have thus far spoken about those activities that will insure that the "lights never go out on the practice of medicine as we know it today"; those activities of the committed members in Dr. Prestis' membership formula. Let me now identify some of the uncommitted.

The National Health Planning and Resources Development Act has been a matter of concern to this

House of Delegates since it was implemented in Mississippi in 1976. Dr. Sammons, of the AMA, recently described Public Law 93-641 as "short of a declaration of war, the single most dangerous piece of legislation" for the health of the American people.

We have, I believe, done everything humanly possible to impress upon all members of the association the serious impact this law will have on the practice of medicine.

Some observations can now be made based on case histories. First, in those areas of the state where the profession has organized on a local level to participate in health planning activities, they have been successful. They have assured meaningful professional participation and input, and are monitoring activities of these agencies.

Secondly, health planning is not the grassroots revolution some originally thought. It is, however, a grassroots campaign to put questions in the mind of the public about their health care. If we are not there to respond, then only one side is heard.

Thirdly, our professional knowledge is an essential element in effective health planning. When we do not make an effort to impart this knowledge, then others such as chiropractors and optometrists speak as the so-called "health experts."

Finally, I would note that the 1979 Mississippi Legislature created a new agency to administer state health planning activities. It was not the agency we supported. However, based on many of you taking the time to make your views known, we had an impact. As a footnote to this, let me add that in those areas of the state where we have more physicians and more legislators, we failed to get one single vote for our position.

Those areas are Jackson and the Gulf Coast. Since I am from one of them, I feel that I can say that in these areas we have been totally inept in meeting our professional responsibilities for health planning in this state.

In a similar vein, I want to put to rest two fallacies that some of our members believe.

The first is expressed in the question "Why doesn't MSMA do something about that?"

My colleagues, MSMA doesn't do anything, only *you* do. We can sit and pass resolutions about the health planning act from here to eternity, but unless *you* get out there and participate in the implementation of these resolutions they are not worth the paper they are written on.

The second fallacy is expressed in the statement "We've got a staff in Jackson, they'll take care of it."

Our staff can't get elected to your local HSA. Your legislator wants to hear from you as a constituent, not from your paid staff in Jackson.

In closing, I have several recommendations for your consideration and a special acknowledgment.

This is an election year in our state. The senators and representatives who are elected from your communities will decide many issues affecting the practice of medicine over the next four years.

There is no better time than now to talk to them. There is no better time than now to let them know that you support them with a contribution and a vote.

There is no better time than now for you and your spouse and friends to work for their election.

I strongly recommend that you get involved. Our Mississippi Medical Political Action Committee will soon be showing you how.

If you don't get involved, I predict that two years from now we will be sitting here passing resolutions against bills enacted by the 1982 Mississippi Legislature.

My second recommendation deals with improving our relationships with federal and state health agencies. I recommend that the association form a specific committee on federal/state health programs.

The committee should monitor, inform and coordinate. It should support federal/state health programs when they are right and yell as loud as it can when they are wrong.

My third recommendation deals with our future members. The vast majority of new physicians in our state will be born, raised and educated here. It is important that we get them involved in organized medicine at an early state. Preferably when they are clinical students, interns and residents.

I recommend that we strengthen our efforts to inform the interns and residents about the issues in health care and about organized medicine.

I further recommend that we strengthen the University Medical Society and invite them to sit on committees of the association.

I now wish to particularly acknowledge on behalf of the association the establishment of a special memorial lecture.

This memorial lecture which will be presented annually before the scientific assembly, beginning next year, has been established in memory of Dr. James Grant Thompson by Mrs. Thompson.

Elizabeth, I know I speak for the House of Delegates and all members of the association when I say thank you.

Again, it has been an honor to serve as president of this great organization.

It has been an eventful year, and with your continued commitment, I can assure you that the lights won't go out on the practice of medicine. Thank you.

★★★

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"It is hard for me to understand . . . why more than 30 years ago when I had my appendix removed by a small town general practitioner, the fee was 60% of what I charge today as an urban, boarded specialist in surgery. And, at that time it cost me three cents to mail a letter and five cents for a newspaper, 15 cents for a Sunday paper. I recently paid \$1 for a Sunday paper that was decrying the skyrocketing costs of medical care."

ROBERT S. FLOM, President,
Minnesota Medical Association



The President Speaking

As We Appear in the Looking Glass

Gerald P. Gable, M.D.
Hattiesburg, Mississippi

There is an admonition of self-appraisal — “if we could only see ourselves as others see us.” Your association has heeded this admonition and now has a detailed statistical analysis of what our patients think of us and how we practice our profession and care for our patient’s needs.

The House of Delegates, at the 1978 annual session, authorized an independent public opinion on health care in Mississippi. Your Board of Trustees contracted with the professional staff of the Department of Marketing of Mississippi State University to conduct this poll. The results of this poll have given us some very valuable information as to what we as physicians can and should do to assure delivery of the best health care to our patients. The study, consisting of 188 specific questions, was conducted in both geographic and demographic areas. It achieved a response rate of 26.5% from over 5,000 questionnaires which were mailed out. A percentage response of this magnitude is considered excellent and is highly representative and reliable. The goals of the study addressed four major sections: general health care, doctors, hospitals, and health care costs.

In regard to general health care, 70% of those polled felt that there was good health care in the state, although 20% disagreed. Eighty-six per cent felt that health care in the state was better than it used to be, but less than 50% felt that medical care is as good as that found in the rest of the country. This latter opinion was one of the most shocking revelations of the study to me because most of us feel that we practice pretty good medicine in our state. Unquestionably, the majority polled (88%) felt the need for more doctors in the state. Eighty-five per cent of those polled felt that the medical profession should provide the leadership to improve the health care in the state as opposed to leadership being provided by the legislature, the governor’s office or other groups.

The study shows, in response to questions about doctors themselves, that we are still rated at the top of the list for honesty and ethical standards as contrasted to politicians, who are rated at the bottom of the list. Most respondents saw physicians as good community leaders and felt that they cared about their patients as individuals; however, most felt that we do not spend enough time with our patients, and 82% felt that our fees were too high. The majority of our patients felt that they could get a doctor when they needed one, and they overwhelmingly disagreed (64%) that physician’s assistants and nurse practitioners should be permitted to diagnose and treat patients to help with the shortage of doctors.

Regarding hospitals and their care of our patients, more than half felt that the hospital care was impersonal, and over half felt that hospitals were run inefficiently. Eighty-five per cent felt that hospital charges were unreasonable.

Health care costs are of great concern to the majority of Mississippians, with 90% agreeing that health care costs are an obstacle to getting the health care that they need. More than one half felt that the federal government should control the rise in medical cost, but only 18% favored a universal system of health insurance covering everybody and paid for by the federal government out of money raised by taxes.

Our public opinion poll has given us much valuable information and has enabled us to see how our patients view us, our health care delivery, our fees and our hospital costs. They have voiced concern for these problems, some of which are real and based on inflationary socioeconomic and political factors over which we have limited control. Others are based on lack of factual communication with our patients, over which we have more control. It is evident that our patients expect us to assume the leadership in trying to help to solve these problems rather than let the federal or state government assume this leadership. It behooves us all to take this as an opportunity to make changes where needed and to inform the public of the facts where appropriate.

Nuclear Disaster Plan Is Needed

Mississippians are now exposed more than ever to the possibility of a nuclear accident. The increasing shipment of radioactive materials into and through our state by air, water, and highways, the use of nuclear energy by public utilities, nuclear waste, and contamination from old nuclear experiments conducted under our surface all point to an urgent need for a well defined, highly tested and functional nuclear disaster plan.

Such a plan must involve the news media, industry, law enforcement agencies, all levels of the health industry, and local and state governing bodies. To be fully successful, the general public must be informed as to the design and functional elements of such a plan. Recent events at Three Mile Island and other nuclear centers point out strongly the need for such a coordinated effort.

How well prepared is the health field to deal with such an instance? Does your hospital currently have a functional nuclear disaster plan? Are proper materials available to handle waste from contaminated patients? How will you dispose of radioactive waste? Who is currently responsible for handling such material? Do you even have a means of monitoring an environment for radiation? Will your care of such patients lead to the total loss of a large portion, or even all of your health facility because of contamination?

Hospital disaster activities and other health field nuclear disaster programs cannot work properly without the cooperation and active participation of fully informed physicians. It is highly significant in this day and time that all physicians remain prepared, alert and ready to face such a challenge.

MYRON W. LOCKEY, M.D.
Associate Editor
Jackson, MS

Dr. Charles N. Floyd Dies

Dr. Charles N. Floyd, a past chairman of MSMA's Council on Medical Education and member of the Council on Medical Service died unexpectedly on May 22.

"Charlie," as he was known to his many friends, had a great love for life and concern for his fellow-man. Perhaps best illustrative of this was the fact that Charlie spent the weekend before his death on the road in service for MSMA's Disabled Physicians' Program. This writer felt that the following letter to the Editor appearing in the *South Mississippi Sun* said it best about Charlie Floyd, the doctor — and friend. — C.L.M.

To the Editor: Dr. Charles Floyd, who died unexpectedly May 22, will be greatly missed by his family, friends and the Gulf Coast community. "Dr. Charlie" will long be remembered as a very principled man who had great affection for people and a gusto for living life to its fullest!

Many of the medical community will recall visions of our departed colleague sprinting about in his white gloves and beat-up sailing hat. There are those of us, like myself, who will remember his dedication to medicine, health education and prevention.

I can recall many long hours spent working side by side with Doctor Charlie in the jungles of Honduras, Central America, on the Christian Medical Society Projects. In this age of modern technology and medicine, it was refreshing to see this dedicated doctor with a flashlight in hand traverse a crude jungle path to check patients in their huts at night. He believed in the spirit of a medical team working together to benefit each patient and their family.

The good people of this community can show no greater tribute to Dr. Charles Floyd than by joining in his commitment to fight cancer with a medical checkup and a check in his memory to the American Cancer Society.

JUDITH CROCKETT, RN
Gulfport, MS

NEW MEMBERS

BLAKE, KENDALL T., Jackson. Born Jackson, MS, Jan. 30, 1945; M.D., Vanderbilt University School of Medicine, Nashville, TN, 1971; interned Harbor General Hospital, Torrance, CA, one year; general surgery residency, same, 1972-73; orthopedic surgery residency, Campbell Clinic, Memphis, TN, 1976-78; elected by Central Medical Society.

DEVGAN, BALDEV KRISHAN, Batesville. Born Lahorn, Pakistan, Jan. 20, 1939; M.D., Galancy Medical College, Punjab University of India, 1961; interned Medical School, Amritsar, India, one year; otolaryngology residency, St. Louis University, MO, 1971-73; general surgery residency, same, 1973-74; otorhinolaryngology residency, same, 1974-75; elected by North Mississippi Medical Society.

DEVGAN, MANJU, Batesville. Born Udaipur, India, Nov. 15, 1943; M.D., Makerere University, University of East India, 1966; pathology residency, St. Louis University School of Medicine, St. Louis, MO, 1973-75; pathology residency, University of Tennessee, Memphis, 1975-77; fellowship in nuclear medicine, same, 1978; elected by North Mississippi Medical Society.

DILLON, ILEY FLOYD, Natchez. Born Magnolia, MS, Aug. 21, 1951; M.D., Louisiana State University School of Medicine, New Orleans, 1975; interned Earl K. Long Hospital, Baton Rouge, LA, one year; internal medicine residency, same, 1977-78; elected by Homochitto Valley Medical Society.

DOWDY, HARRY LEE, Yazoo City. Born Cape Girardeau, MO, Aug. 19, 1946; M.D., University of Tennessee College of Medicine, Memphis, 1970; interned City of Memphis Hospitals, Memphis, TN, one year; radiology residency, Baptist Memorial Hospital, Memphis, 1972-74; elected by Central Medical Society.

FUCHS, PAUL DANIEL, Mound Bayou. Born Pittsburgh, PA, Jan. 12, 1948; M.D., University of South Carolina Medical School, Columbia, 1977; interned University of Texas, Galveston, one year; elected by Delta Medical Society.

GOEL, DINESH KUMAR, Prentiss. Born Aligarm, India, Sept. 9, 1945; M.D., King George's Medical College, India; interned Salem Hospital, Salem, MA, one year; general surgery residency, Ford Hos-

pital 1972-73; general surgery residency, St. Vincent Hospital, Worcester, MA, 1973-76; elected by South Mississippi Medical Society.

HARDY, MERRILL DEMPSEY, JR., Jackson. Born Jackson, MS, Oct. 3, 1947; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned, UMC, Jackson, one year; medicine residency, same, 1974-76; pulmonary diseases residency, same, 1976-78; elected by Central Medical Society.

HENDRICKSON, MARJORIE HOLTZCLAW, Jackson. Born Port Arthur, TX, June 30, 1932; M.D., University of Texas Southwestern Medical School, Dallas, 1958; interned University Hospital, Birmingham, AL, one year; anesthesiology residency, University of Texas, 1959-61; elected by Central Medical Society.

KIMBLE, RAYMOND V., III, Greenville. Born Greenville, MS, Aug. 21, 1944; M.D., University of Mississippi School of Medicine, Jackson, 1971; interned and psychiatry residency, UMC, Jackson, 1972-75; elected by Delta Medical Society.

MABRY, MICHAEL STOKES, Mississippi State University. Born Liberty, MS, Mar. 18, 1950; M.D., University of Mississippi School of Medicine, Jackson, 1975; interned and family practice residency, UMC, Jackson, 1975-78; elected by Central Medical Society.

MLADINEO, JOHN PHILIP, Jackson. Born San Pedro, CA, Oct. 23, 1942; M.D., Loyola University School of Medicine, Chicago, IL, 1970; interned San Bernardino County General Hospital, CA, one year; ob-gyn residency, same, 1971-74; elected by Central Medical Society.

MITCHELL, ERNEST H., JR., Columbus. Born Jackson, MS, Sept. 14, 1943; M.D., University of Mississippi School of Medicine, Jackson, 1967; interned Boston Naval Hospital, Chelsea, MA, one year; ob-gyn residency, National Naval Medical Center, Bethesda, MD, 1973-76; elected by Prairie Medical Society.

OLIPHANT, WILLIAM WALKER, Dekalb. Born Bristow, KY, June 9, 1917; M.D., Loma Linda University School of Medicine, Loma Linda-Los Angeles, CA, 1956; interned Pontiac General Hospital, Pontiac, MI, one year; surgery residency Kendu Hospital, Kenya, East Africa, 1960-62; elected by East Mississippi Medical Society.

ORGLER, RAYMOND JOHN, Starkville. Born Chicago, IL, May 12, 1945; M.D., Loyola Univer-

sity Stritch School of Medicine, Maywood, IL, 1971; interned Naval Hospital, San Diego, CA, one year; general surgery residency, same, 1972-76; elected by Prairie Medical Society.

ROWE, LUTHER CONRAD, Gulfport. Born Cordova, AL, June 25, 1934; M.D., University of Alabama School of Medicine, Birmingham, 1959; interned Tampa General Hospital, Tampa, FL, one year; general surgery residency, University of Alabama Hospital, Birmingham, 1960-61; orthopedic surgery residency, same, 1964-67; elected by Coast Counties Medical Society.

RUVINSKY, MARCELO JOSE, Jackson. Born Salta, Argentina, Dec. 16, 1947; M.D., Cordoba University Medical School, Cordoba, Argentina, 1971; interned UMC, Jackson, MS, one year; internal medicine residency, same, 1972-74; nephrology fellowship, same, 1976; elected by Central Medical Society.

SKIWSKI, JACOB, Columbus. Born Depoltz, Greece, Nov. 5, 1946; M.D., Loma Linda School of Medicine, Loma Linda-Los Angeles, CA, 1971; interned Keesler Medical Center, Biloxi, MS, one year; pediatric residency, same, 1972-74; elected by Prairie Medical Society.

WHITE, ELBERT A., III, Corinth. Born Corinth, MS, July 17, 1935; M.D., Vanderbilt University School of Medicine, Nashville, TN, 1960; interned, same, one year; surgery residency, same, July-Sept. 1961; pediatric residency, same, 1964-66; ophthalmology residency, same, 1976-78; pediatric ophthalmology fellowship, University of Louisville, KY, Sept.-Nov. 1978; elected by Northeast Mississippi Medical Society.

WIGGINS, CHRISTOPHER EDWARD, Pascagoula. Born Pascagoula, MS, Aug. 6, 1946; M.D., University of Arkansas School of Medicine, Little Rock, 1971; interned Parkland Memorial Hospital, Dallas, TX, one year; orthopedic surgery residency, University of Arkansas, Little Rock, 1974-77; elected by Singing River Medical Society.

DEATHS

FARMER, I. CHESTER, Laurel. Born Handsboro, MS, Aug. 3, 1911; M.D., University of Tennessee School of Medicine, Memphis, 1938; interned John Gaston Hospital, Memphis, Aug. 1938-Sept. 1940;

dermatology residency, Receiving Hospital, Detroit, MI, 1945-48; died May 25, 1979, age 67.

FLOYD, CHARLES N., Gulfport. Born Kyrock, KY, May 6, 1920; M.D., University of Louisville School of Medicine, Louisville, KY, 1949; interned Vanderbilt University, Nashville, TN, one year; surgery residency University of Louisville, 1950-55; died May 22, 1979, age 59.

PERSONALS

JACK A. ATKINSON of Brookhaven was chairman of the planning committee for a seminar sponsored by King's Daughters Hospital. BRAXTER IRBY and JASPER BECKER were committee members. Among the speakers were WILLIAM O. BARNETT and ERWYN E. FREEMAN, both of UMC.

D. L. BOLTON of Picayune announces the association of ROGER SEARLE, formerly of Poplarville, in family practice.

LAMAR BURROW of McComb has been elected to the post of Pike County coroner.

GUY D. CAMPBELL of UMC served on the nominating subcommittee for the American College of Chest Physicians in Chicago recently, and met with the board of directors of the American Lung Association in Las Vegas.

WILLIAM A. CAUSEY of Jackson has been named chief of medicine at the Veterans Administration Medical Center.

EDGAR DRAPER of UMC participated in the recent meeting of the Mississippi Medical and Surgical Association.

RAYMOND F. GRENFELL, SR. of Jackson announces the association of RAYMOND F. GRENFELL, JR. in the practice of internal medicine and endocrinology at 514-H E. Woodrow Wilson.

JAMES D. HARDY of UMC was guest speaker for a meeting of the Alabama Chapter of the American College of Surgeons.

D. L. HARRISON of Grenada announces the relocation of his offices in the Physicians Office Building.

JAMES L. HUGHES of UMC was a member of the faculty for a fracture symposium held recently in Burlington, VT.

PERSONALS/Continued

MICHAEL JABALEY of UMC received the Kaplan Award from the American Society for Surgery of the Hand for the best paper on an anatomical subject. Co-authors are FRED HECKLER and WILLIAM WALLACE, both of UMC.

T. D. LAMPTON chaired the recent annual meeting of the Mississippi Heart Association held in Meridian.

HERBERT LANGFORD of UMC spoke at a meeting of the American Heart Association in Santa Rosa, CA.

RONALD R. LUBRITZ of Hattiesburg was a member of the faculty at the Third International Symposium on Plastic and Reconstructive Surgery, which was held recently in New Orleans.

ANDY MYRICK announces the opening of his office for the practice of surgery at Physicians and Surgeons Clinic in Amory.

NORMAN C. NELSON of UMC was commencement speaker for Northeast Mississippi Junior College recently and spoke at a meeting of the Forrest County Alumni Association in Hattiesburg.

RON RENNICK of Poplarville announces the closing of his offices due to a move to the West Coast area.

BROWN ROBERTSON is now associated with the Tupelo Ear, Nose and Throat Surgical Clinic (HAROLD K. HUDSON, ROGER L. LOWERY, and MALCOLM D. MCAULEY) at 618 Pegram Drive.

W. K. STEWART of Pass Christian has been recertified for membership in the American Academy of Family Physicians.

JAMES P. WOOD of Waynesboro has been named finance chairman of the gubernatorial campaign of John Arthur Eaves.

POSTGRADUATE CALENDAR

July 26-28, 1979

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE

Delta Medical Center, Greenville

Sponsored by the University of Mississippi School of Medicine Department of Anesthesiology and the Medical Center Division of Continuing Health Professional Education.

Coordinators: G. H. Holloman, M.D., Delta Medical Center; and Thomas J. Herrin, M.D., associate professor of anesthesiology, University of Mississippi School of Medicine.

Open to physicians and registered nurses who have been certified by the American Heart Association in basic life support. The course will be taught by faculty qualified by the American Heart Association as advanced cardiac life support instructors. Fee: \$110. Credit: 12 contact hours, 1.2 CEU, Category I of the Physicians' Recognition Award of the AMA; AAFP.

July 27-28, 1979

SUPPORTIVE CARE FOR THE ONCOLOGY PATIENT
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine and the Medical Center Division of Continuing Health Professional Education.

Coordinator: J. Tate Thigpen, M.D., associate professor of medicine and assistant professor of obstetrics and gynecology, University of Mississippi School of Medicine.

This is the first in a series of quarterly symposia planned for the general practitioner, internist, surgeon and radiation therapist. Daily management and supportive care of the cancer patient will be emphasized. Fee: \$40.00. Credit: 8 contact hours, .8 CEU, Category I of the Physician's Recognition Award, AMA.

FUTURE CALENDAR

October 18-20

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
University Medical Center, Jackson

December 7-9

FAMILY MEDICINE REVIEW
University Medical Center, Jackson

January 24-26, 1980

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
University Medical Center, Jackson

All continuing education correspondence should be addressed to: Continuing Health Professional Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

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PHARMACEUTICAL DIVISION

COMPATIBILITY



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Vasodilan—compatible with coexisting diseases (e.g., glaucoma, diabetes)

Vasodilan has not been reported to affect the course of coexisting disease; it has not been reported to affect blood sugar levels or to raise intraocular pressure.

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Vasodilan has not been reported to affect the treatment of coexisting disease; it is compatible with such drugs as hypoglycemics and miotics.

Vasodilan—compatible with your total regimen for vascular insufficiency

Vasodilan can be a valuable adjunct in planning a total therapeutic program for vascular insufficiency.

***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily. Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

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VASODILAN[®] 20-mg tablets

(ISOXSUPRINE HCl)

20 mg q.i.d. recommended dosage

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PHARMACEUTICAL DIVISION

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- theophylline for effective
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Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema.

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after oral dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitroazanaphthal reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100. Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

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State Pediatricians Support AAP Campaign

The American Academy of Pediatrics (AAP), wanting the United States "to stop wasting its most valuable natural resource — children," has initiated a two-year educational campaign, "Speak Up for Children." The Mississippi chapter of the AAP supports the program's national goals and in addition, has identified three state priorities, according to Dr. William F. Sistrunk of Jackson, chapter chairman.

During 1979, the International Year of the Child, and 1980, the Academy's 50th anniversary, pediatricians will attempt to increase awareness of all issues affecting children. The four primary goals of the nationwide campaign are: accident prevention, nutrition, immunization and health education. In Mississippi, three additional goals are: to improve perinatal care, to increase the number of primary care physicians, and to implement a statewide thyroid and PKU screening program for newborns. Enabling legislation for the screening program passed the 1978 legislature, but the program requires funding. The Mississippi chapter will also place emphasis on funding of the Statewide Sick Newborn Transport System, to include coverage in private health insurance policies.

Specific national goals within the program's four areas of emphasis include: (1) accident prevention — to increase awareness of the need to use appropriate child restraints for children weighing less than 40 pounds; (2) nutrition — to ensure that the federal government's program of supplemental feeding for women, infants and children (WIC) is operating at maximum levels of efficiency in every state; (3) immunization — to advocate strict enforcement of state laws requiring immunization for school entry; (4) health education — to seek the establishment of comprehensive health education programs in all primary and secondary schools, with properly qualified teachers.

The action/awareness program will rely heavily on volunteer support in focusing attention on the special needs of infants, children and adolescents. Media programming will be utilized; community involvement will be encouraged; advocacy in government and other organizations will be exercised;

and pediatrician's offices will serve as sources for educational and promotional materials.

Promotional materials available to the general public include: T-shirts, bumper stickers, buttons, decals, poster sets and brochures. More information may be obtained from the Special Projects Director, American Academy of Pediatrics, P.O. Box 1034, Evanston, IL 60204.

Heart Association Names New Officers



The American Heart Association — Mississippi Affiliate's outgoing president, Dr. Cecil T. Williams, Jr. of Laurel, left, congratulates new president Preston H. Gough of Jackson, center, and president-elect Dr. Walter H. Rose of Indianola, right. Other 1979-80 officers chosen at the association's annual meeting held in Meridian include: John P. Maloney, vice president; Dr. Quinton Dickerson, secretary; William R. Boone, treasurer; and William G. Shackelford, assistant treasurer, all from Jackson.

UMC Holds Commencement Ceremonies

One hundred and forty-six students received the M.D. degree in University of Mississippi Medical Center Commencement ceremonies in Jackson May 27.

Chancellor Porter L. Fortune, Jr., conferred 337 degrees in the health sciences, including the first 21 doctor of dental medicine degrees awarded in the state.

Summa cum laude graduate James Robert Haltom of Natchez earned the University's Leathers Award as the graduating medical student with the highest academic average. Dr. Haltom was named to Phi Kappa Phi and Alpha Omega Alpha national honoraries while at UMC, and also received four consecutive Book Awards, the Raymond A. Alford Memorial Award, the Sandoz Award and the Upjohn Award, all for academic excellence. A dean's list scholar who earned his B.A. at Ole Miss, Dr. Haltom is the son of Mr. and Mrs. R. B. Haltom. He will intern at Vanderbilt University Affiliated Hospitals in Nashville.

Other honor graduates in the School of Medicine were Rafel Dwaine Rieves of Smithville, William T. Denton of Pope, and John Kenneth Wallace of Hattiesburg, who received their degrees magna cum laude. Cum laude graduates were Gary LeRoy Webb of Gulfport, Donald Ellis Williamson of Louisville, Harrell Edward Cox of Jackson, Marshall Lagrone Houston, III of Walnut, Alfred Fervin Windham of Edwards and William Robert Smith of Wesson.

In commencement ceremonies at city auditorium, 82 students earned the B.S. degree in nursing, 31 a masters degree in nursing, seven a masters degree in a basic or combined science, and seven the Ph.D.

Four students received the B.S. in medical technology, the first awarded on the Medical Center campus, 10 a B.S. in medical record administration, 20 a B.S. in physical therapy and nine the B.S. in nurse anesthesiology.

UMC Top Graduate Receives Award



Summa cum laude graduate James Robert Haltom of Natchez, third from left, received the University of Mississippi School of Medicine's Leathers Award as the graduating medical student with the highest academic average. With him are from left, Dr. Verner Holmes of McComb, member of the Board of Trustees, Institutions of Higher Learning; Dr. Norman C. Nelson, UMC vice chancellor and medical school dean; Ole Miss Chancellor Porter L. Fortune, Jr.; board member Dr. John R. Lovelace of Batesville; board president Bobby Chain of Hattiesburg.

Thoracic Society Meets in Jackson



A week-long intensive course on pulmonary medicine which included the 23rd annual meeting of the Mississippi Thoracic Society and the sixth annual Boswell Lecture was held recently at the Veterans Administration Medical Center in Jackson. Among participants were (from left) Dr. Joe R. Norman, professor of medicine; director, Division of Pulmonary Disease, University Hospital; Dr. Hans Weill, professor of medicine, Tulane University School of Medicine, who presented the Boswell lecture; Dr. Dwight S. Keady, newly-elected president of the Mississippi Thoracic Society and Dr. A. Wallace Conerly, assistant professor of medicine; director, Respiratory Therapy, University Hospital. Dr. Norman and Dr. Conerly served as course coordinators of the continuing education program which was co-sponsored by the Mississippi Lung Association, the University of Mississippi School of Medicine and the University Medical Center Division of Continuing Health Professional Education.

Dr. G. E. Arnold Retires from UMC

Dr. Godfrey Edward Arnold, professor of surgery and director of the Division of Otolaryngology at the University of Mississippi Medical Center, was cited for 16 years of service to the institution in UMC Commencement ceremonies May 27.

Dr. Arnold, who is also associate professor of physiology and biophysics, retired June 30.

Internationally recognized for his work in otolaryngology, Dr. Arnold developed the innovative teflon injection for vocal cord paralysis and added significant research data to literature on the clinical application of the autogenous vaccine for treatment of juvenile laryngeal papillomatosis.

Author of five books, Dr. Arnold has contributed to eight others and has published more than 200 papers in professional journals.

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As the first professional organization for medical assistants (founded 1956), AAMA pioneered in developing the only certification program in this field. A medical assistant who successfully completes the basic examination is identified as a Certified Medical Assistant (CMA). Specialty categories include administrative (CMA-A), clinical (CMA-C), and pediatric (CMA-Ped). More than 7,500 certificates have been earned since the first examination was given in 1963.

The AAMA pioneered in the development of curriculum standards for medical assisting programs. The American Medical Association, in collaboration with AAMA, is recognized as an official accrediting agency for such programs by the U.S. Office of Education.

On five different occasions the AMA House of Delegates has passed resolutions commending the objectives of AAMA, endorsing its functions, and urging every physician to encourage medical assistants to join the association in order to benefit from its educational programs.



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Names of assistants

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MLA Holds Annual Meeting



"Matters of Life and Breath" were in special focus at the 67th annual meeting of the Mississippi Lung Association. Dr. John F. Busey (left) of Jackson, director of medical education, Mississippi Baptist Medical Center, was installed as president of the MLA Board of Directors and Dr. Clyde A. Watkins of Jackson, medical consultant, TB Control Unit, Mississippi State Board of Health, presented the keynote address. His topic was "Tuberculosis Programs and Problems Today in Mississippi."

Three New Members Added to UMC Faculty

Three physicians have joined the School of Medicine faculty at the University of Mississippi Medical Center.

Dr. Norman C. Nelson, UMC vice chancellor and medical school dean, announced the appointments following approval by the Board of Trustees, State Institutions of Higher Learning.

In the Department of Family Medicine, Dr. Robert Elton Smith was named associate professor and Dr. Robert Cowan Forbes an assistant professor. Dr. Monica Joan Collins was named an instructor in pediatrics.

Dr. Smith, associate director of the West Side Family Practice Center at the Akron (OH) General Medical Center since 1977, earned the M.D. degree at the University of Pennsylvania School of Medicine. He earned the B.S. at the University of Akron

and interned at Akron City Hospital. He had been in private practice in West Virginia and Ohio since 1951.

Dr. Forbes, a private practitioner in Nova Scotia since 1972, was medical officer for the Department of Health and Welfare in Canada from 1971-1972. He earned the B.S. at the University of Toronto and the M.D. at the Toronto School of Medicine.

A pediatrician with the Jackson-Hinds Comprehensive Health Center since 1974, Dr. Collins earned the B.S. degree at Marianopolis College and the M.D. degree at the University of Ottawa. Dr. Collins has also been on the staff of the Medgar Evers Health Center in Fayette and the Tufts-Delta Health Center in Mound Bayou.

Kaplan Award Presented to Dr. Jabaley

Dr. Michael Jabaley, professor of surgery and chief of the division of plastic surgery at the University of Mississippi Medical Center, has received the Immanuel Kaplan Award from the New York Society for Surgery of the Hand for the best paper on an anatomical subject presented at the annual meeting of the American Society for Surgery of the Hand.

Dr. Jabaley presented the paper, "Internal Arrangement of Peripheral Nerves in Forearm and Hand," at the group's annual meeting in San Francisco. His co-authors are Dr. Fred Heckler, assistant professor of surgery (plastic) and Dr. William Wallace, chief plastic surgery resident.

In 1977, Dr. Jabaley won the Robert H. Ivy Society Award for the best paper presented at the annual meeting of the American Society of Plastic and Reconstructive Surgeons.

The plastic surgeon, a member of the Medical Center faculty since 1972, was the first surgeon in Mississippi elected to membership in the American Society for Surgery of the Hand.

Mississippians Nominated For National Offices

Mrs. Jean Hill of Hollandale, wife of Dr. Ed Hill, has been nominated for election to the board of the American Medical Association Auxiliary, which meets this month in Chicago. Mrs. Hill is a director and chairman of the finance committee of MSMA Auxiliary.

Dr. Curtis W. Caine of Jackson has been nominated for the post of president-elect of the Association of American Physicians and Surgeons, which will meet Oct. 4-6 in Charleston, SC.



A reminder

ZYLOPRIM[®]

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim[®] (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease. Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol[®] (mercaptopurine) or Imuran[®] (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age: Zyloprim[®] (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular: There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim[®] (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic: There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yu for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVERDOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIED: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)



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Dr. Atkinson Is Commission Chairman

Dr. Jack A. Atkinson of Brookhaven has been elected chairman of the Mississippi Health Care Commission. The new commission, which was established by the 1979 legislature, will handle certificate of need and statewide health planning activities, among other duties. Dr. Atkinson, a former MSMA president, recently chaired the association's Committee to Study Health Needs.

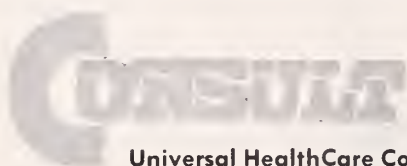
Dan S. Wilford, administrator of the North Mississippi Medical Center was named vice chairman of the commission, and attorney Sara F. Gallaspy of Jackson, was elected secretary.

Other members of the commission are Morris L. Scott of Hernando; Thomas L. Wallace of Columbia; John A. Darnell of Glen Allen; and Dr. Alton B. Cobb of Jackson. Dr. Cobb, as State Health Officer, serves as an ex officio member of the commission.

The appointments to the commission were made by Governor Cliff Finch, Chief Justice Neville Patterson, Secretary of State Heber Ladner, House Speaker C. B. Newman, and Lieutenant Governor Evelyn Gandy.

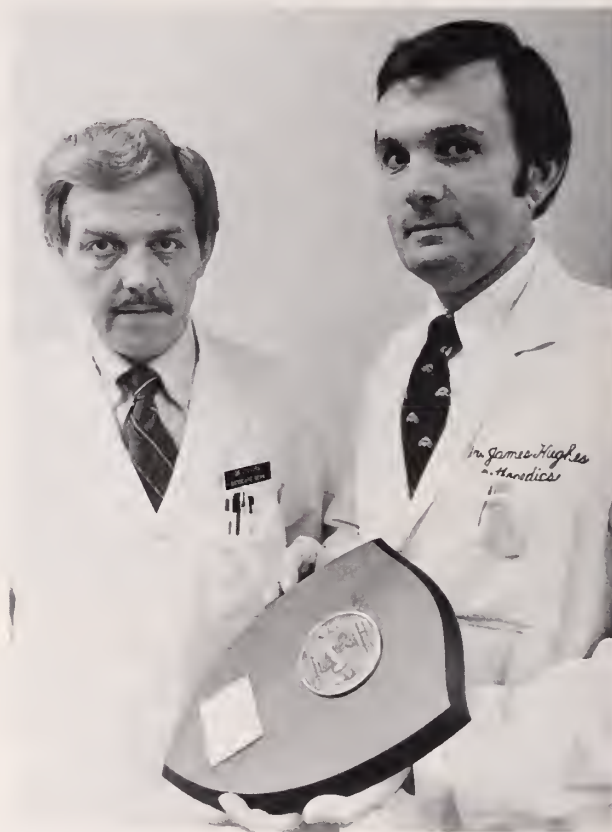
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MSMA Aesculapius Award Won by UMC Orthopedics Division



The Division of Orthopedics in the Department of Surgery at the University of Mississippi Medical Center received the Aesculapius Award for the best scientific exhibit at the 1979 meeting of the Mississippi State Medical Association. Dr. James L. Hughes (right), UMC professor of surgery (orthopedics) and chief of the orthopedic division, accepted the award from Dr. Carl Evers (left), immediate past president of the Mississippi State Medical Association and UMC associate dean for academic affairs. The exhibit was on the use of the Wagner traction device in certain fractures. Recipients of the award along with Dr Hughes were Dr. Heinz Wagner of Altdorf, Germany, designer of the orthopedic device, Dr. E. Frazier Ward, UMC assistant professor of surgery (orthopedics) and Dr. Charles Rhea, UMC orthopedic resident.

Practice Management Workshops Scheduled

Mississippi State Medical Association will sponsor Practice Management Workshops for medical assistants in September. Dates for the workshops are Sept. 18, in Oxford; Sept. 19, in Jackson; and Sept. 20, in Biloxi. Meeting sites will be announced later, but physicians are encouraged to have their assistants mark the dates on their calendars now.

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Excellent opportunity for Board certified or eligible Otolaryngologist. Modern and progressive hospital, medical community and service area, all of which are committed to give full support to Otolaryngologist. Twenty-two physician medical community representing ten specialties in medicine. However, no otolaryngologist specialists practicing in primary service area of at least 50,000 population. Nearly all ENT referrals by physicians and self referrals by patients require travel of 30 to 60 miles to nearest ENT specialists. Financial and professional opportunity unlimited and family-community oriented lifestyle extremely attractive. Please contact:

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OUTSTANDING multi-hospital emergency group in practice for the past 13 years has excellent emergency physician opportunities available in Mississippi. Fee-for-service. Malpractice insurance provided via a group policy. If interested please call or write to: John D. Stein, Assistant Administrator, Professional Emergency Physicians, 897 MacArthur Blvd., San Leandro, CA 94577. Telephone (415) 638-3979.



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NEW YORK ACADEMY
OF MEDICINE

IN CONCLUSION

A "Voluntary Effort Chartbook" has been distributed by the American Hospital Association. The book was prepared by AHA's office of Research Affairs and is intended to serve as a source document on the economic environment surrounding hospitals. It identifies factors accounting for increases in hospital expenses and reports on trends in hospital finances. Copies are available at a cost of \$4.00 from the AHA Order Department, 840 N. Lake Shore Drive., Chicago, IL 60611.

Digestive diseases account for 15% of all U. S. hospital stays, but research into these diseases is inadequate and sparsely funded, says a report to Congress by the National Commission on Digestive Diseases (a 26-member HEW advisory group created by Congress in 1976). The report concludes that digestive diseases collectively represent 10% of the nation's total economic burden of illness, ranking third to circulatory diseases and to the combined category of accidents, poisonings and violence.

The average American man has gotten heavier in the last 20 years and the average woman has gotten lighter, according to the findings of a new life insurance study which investigated the build and blood pressure of more than four million people. The study found that death rates associated with overweight and high blood pressure have declined. Mortality ratios begin to climb at mildly elevated blood pressures in untreated patients, but drops to near normal in hypertensive patients under treatment.

The largest automatic cost of living increase in benefits in the history of the Social Security program will take place this month. Nearly 35 million social security beneficiaries and nearly 4 million supplemental security income recipients will receive a 9.9% increase in their benefits. The increase will cost the social security trust funds an estimated \$10.2 billion in fiscal year 1980 alone, and an estimated additional \$415 million from general revenues.

Suicides among the young have increased in the past decade at a high rate, says a report in the June 1 journal of the AMA. The rate for adolescents aged 15-19 has increased 124% since 1961, and suicide has moved from being the fourth ranking cause of death among that age group in 1969 to its present rank of third. A Dallas child psychiatrist described the typical patient as a girl drug abuser with major depressive disorder. He said all suicide threats should be taken seriously.



For recurrent attacks of urinary tract infection in women

Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. **Note:** The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarthritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
20	9	1 teasp. (5 ml)	½ tablet
40	18	2 teasp. (10 ml)	1 tablet
60	27	3 teasp. (15 ml)	1½ tablets
80	36	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	½ the usual regimen
Below 15	Use not recommended

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



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Please see back cover.

Her next attack of cystitis may require the Bactrim™ 3-system counterattack



ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

August 1979

Journal of the
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BALCONY

Mississippi

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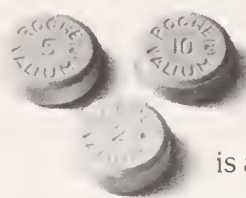
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Find Out What
Your Patients Want:
Conduct a Survey





A character all its own.

Valium (diazepam/Roche)
is a benzodiazepine with a
character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium®^{IV} diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic
tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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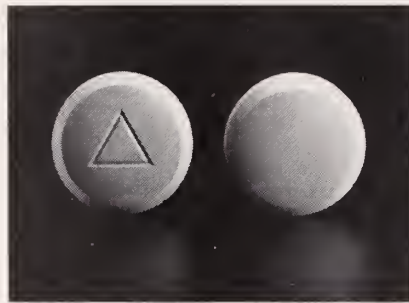
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The Maker

Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.



MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were

not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

MYTH: Industry favors only "expensive" brand names and denigrates all generics.

FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.

Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

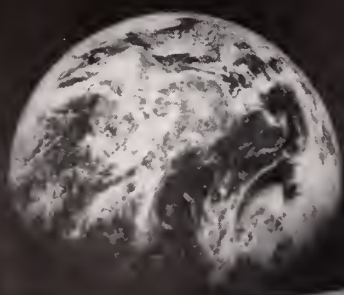
The logo for the Pharmaceutical Manufacturers Association (PMA) consists of the letters 'PMA' in a bold, stylized, sans-serif font. The 'P' and 'M' are connected, and the 'A' is separate.

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AMA Criticizes CHAP

The AMA has told Congress the Administration's Child Health Assurance Program (CHAP) would "add further confusion to an already heavy burden of administering Medicaid laws."

William Felch, M.D., Chairman of the AMA's Council on Legislation, said different sets of rules, provider benefits, reimbursement and cost sharing for CHAP would add to the major problems that states have in administering Medicaid. "Child Health Programs are distinct and should not be imposed upon the Medicaid program any further," Dr. Felch told the Senate Finance Subcommittee on Health.

The early and periodic screening, diagnosis and treatment (EPSDT) program would be replaced by CHAP, which would increase the number of children and pregnant women eligible for Medicaid.

Dr. Felch said there appears to be no clear understanding of the reasons for the failure of EPSDT, and no base of experience as to what effect the proposed CHAP changes might have on Medicaid and the provisions of care for the children. "This legislation would introduce a major new program with distinctive needs and copious administrative requirements into a Medicaid program already beset with complex problems."

Dr. Felch noted that child health assessments under the program could be provided only by a health care provider who entered into a specific agreement with a state Medicaid agency. He said this provision is "highly undesirable and could result in differences in the availability and level of health care available to CHAP beneficiaries, as compared to health services available to others."

ERRATUM

The scientific paper "Analgesic Nephropathy," which appeared in the June issue (page 119) of JOURNAL MSMA contained an error. In the third paragraph, the sentence beginning with the words "Acetaminophen constitutes . . ." should have read as follows: "These compounds are the main ingredients of some commercially available preparations, such as Excedrin, Vanquish, Darvon Compound, Empirin, Fiorinal, Norgesic, SK-65 and Percodan." — The Editors.

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INDICATIONS: *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the

ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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For additional information contact: John R. Reedy,
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Riverside Hospital

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NEWSLETTER

August 1979

Dear Doctor:

The American College of Surgeons, representing over 42,000 members, recommends that individual surgeons voluntarily restrain the rate of increase in professional fees and suggests that surgeons speak out against exorbitant fees. These were among the specific measures which can be taken by surgeons to control costs without sacrificing quality of care, as outlined in a policy statement on cost containment released last month by the ACOS.

The College urges continued support of the Voluntary Effort and emphasizes that surgeons should cooperate with cost containment committees being established by hospital associations, medical societies and hospitals. They recommend that cost control programs be included in hospital staff meetings.

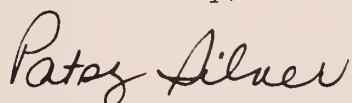
ACOS also recommended that preoperative evaluation be made on an outpatient basis as much as possible, in an effort to shorten hospital stays; cautioned against "over-evaluating" the patient; advised coordination between surgeons and other physicians to avoid duplication of tests; and discouraged routine "batteries" of tests upon hospital admission.

Other recommendations include: that physicians notify hospital cost containment personnel when delayed or neglected tests necessitate a longer hospital stay; that physicians be given copies of patients' hospital bills; that they resist patient pressure for additional tests or longer than necessary hospital stays; and that surgeons continue to consider outpatient or office surgery whenever possible.

A cost awareness program at the Medical College of Georgia has been funded by Blue Shield of Georgia/Columbus. The plan, designed to help medical students and residents become aware of costs, will introduce an element of peer pressure to reduce costs. The use of computerized systems, cost containment conferences, rapid laboratory reporting systems and daily cumulative bills on patients will be used.

The newsletter of the Harris County Medical Society of Houston, TX, noting that "a very small segment of the profession is abusing the privilege and honor of being a physician," is publicizing overutilization and fee abuses. The first "case study" described a physician's services (names are withheld), and revealed that his fee was found to be \$1,300 above the median charge for the same services.

Sincerely,



Patsy Silver
Managing Editor

MOSCOW 1980



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Republicans Hit Kennedy's Health Bill

The House Republican Research Committee has said that Sen. Edward Kennedy's new national health plan bears a number of fundamental similarities to the British National Health Service "which foreshadow the direction this nation's health care delivery system could be expected to go if Kennedy's bill became law."

The committee, an arm of House Republicans, said both the British National Health Service and the Kennedy proposal provide universal coverage and comprehensive benefits — with no cost sharing. Under the Kennedy plan, certain mental health, drug and other benefits would be limited, but like the British system all hospital and physician services, X-rays, lab tests, and most other services would be provided "free" upon treatment.

"The side effect of such 'free' care is, of course, limitless demand. And with a limited number of providers trying to meet the limitless demand, a rationing of services — as already exists in England — would inevitably result," the committee's Task Force on Health Policy said.

Hyperactive Children Adjust Well

What happens to that hyperactive child when he or she grows up? The adolescent or young adult still may have some problems, but for the most part the child who had such a rough time in school learns to cope reasonably well with the adult world, says a research report in the June *Archives of General Psychiatry*.

A Montreal research team studied a group of children who had been classified as hyperactive some 10 to 13 years earlier, when the youngsters ranged from age 6 to age 13. They found many hyperactive subjects continued to have some difficulties of adjustment, but only a small minority showed severe psychopathology or had serious antisocial behavior.

The hyperactive children were more likely to be impulsive adults than their less active peers. They had more auto accidents, and changed their place of residence more frequently.

There was no difference in the job status of the once-hyperactive children and their normal peers, said the author, Gabrielle Weiss, M.D., of Montreal Children's Hospital and McGill University. However, in adolescence the hyperactive have an impaired self esteem which continues into adult life, despite ability to hold their own in the business world.

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Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies

before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

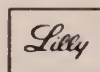
Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin.

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*Equivalent to penicillin V.

Additional information available to the profession on request.



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Treatment with TRIAVIL— a balanced view:

TRIAVIL is contraindicated in CNS depression from drugs, in the presence of evidence of bone marrow depression, and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. TRIAVIL may impair mental and/or physical abilities required for performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to overdosage of other drugs or mask other disorders. The possibility of suicide in depressed patients remains until significant remission occurs. Such patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

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for a brief summary
of prescribing information.*

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4 mg perphenazine and 50 mg amitriptyline HCl.
TRIAVIL® 4-25: Each tablet contains
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TRIAVIL® 4-10: Each tablet contains
4 mg perphenazine and 10 mg amitriptyline HCl.

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); evidence of bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Should not be given concomitantly with a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. When used to replace a monoamine oxidase inhibitor, allow a minimum of 14 days to elapse before initiating therapy with TRIAVIL. Therapy should then be initiated cautiously with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given concomitantly with guanethidine or similarly acting compounds since TRIAVIL may block the antihypertensive action of such compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. Dosage of anticonvulsive agents may have to be increased. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time, particularly in high doses. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. In patients who use alcohol excessively, potentiation may increase the danger inherent in any suicide attempt or overdosage. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of some untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides. There is sufficient experimental evidence to conclude that chronic administration of antipsychotic drugs which increase prolactin secretion has the potential to induce mammary neoplasms in rodents under the appropriate conditions. There are recognized differences in the physiological role of prolactin between rodents and humans. Since there are, at present, no adequate epidemiological studies, the relevance to human mammary cancer risk from prolonged exposure to perphenazine and other antipsychotic drugs is not known.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) have been reported and can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw. Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. Fine vermicular movements of the tongue may be an early sign of the syndrome. The full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect, hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; other adverse reactions reported with various phenothiazine compounds, but not with perphenazine, include grand mal convulsions, cerebral edema, polyphagia, pigmentary retinopathy, photophobia, skin pigmentation, and failure of ejaculation.

The phenothiazine compounds have produced blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); and liver damage (jaundice, biliary stasis).

Pigmentation of the cornea and lens has been reported to occur after long-term administration of some phenothiazines. Although it has not been reported in patients receiving TRIAVIL, the possibility that it might occur should be considered.

Hypnotic effects, lassitude, muscle weakness, and mild insomnia have also been reported.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs and must be considered when amitriptyline is administered. **Cardiovascular:** Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. **CNS and Neuromuscular:** Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia, nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Anticholinergic:** Dry mouth; blurred vision; disturbance of accommodation; increased intraocular pressure; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. **Allergic:** Skin rash; urticaria; photosensitization; edema of face and tongue. **Hematologic:** Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. **Gastrointestinal:** Nausea; epigastric distress; vomiting; anorexia, stomatitis; peculiar taste, diarrhea, parotid swelling, black tongue. Rarely hepatitis (including altered liver function and jaundice). **Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. **Other:** Dizziness, weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. **Withdrawal Symptoms:** Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1-3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered

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Animal Tests of Drugs Are Held Invalid

Giving animals huge doses of drugs to determine whether the drugs cause cancer does not tell scientists whether the drug would cause cancer in humans, says a communication in the July 6 *Journal of the American Medical Association*.

Dr. John C. Ballin, director of AMA's Department of Drugs, commenting on the National Cancer Institute's project of testing commonly used drugs for their possible carcinogenic effect in animals, points out that the animals often are fed doses exceeding the usual human consumption by factors of 50-, 100-, or 1,000-fold.

Results of such tests have recently been released for reserpine, a common anti-high blood pressure drug, and methapyralene, an antihistamine. They may cause cancer in animals in massive overdoses, but "the conditions of use in such tests bear little relation to the conditions of use in human patients."

It is possible, Dr. Ballin says, that many chemicals, such as saccharin, can induce cancer in animals if huge doses are given during an entire lifetime.

"This does not mean, however, that such drugs or chemicals are carcinogenic in man when taken according to labeled directions. Aside from the enormous differences in dose and duration, it is not possible to extrapolate data derived from animal experiments to human response," Dr. Ballin declares.

"Since the results of these NCI tests do not prove that the drugs are carcinogenic to man under usual circumstances of use, it would be unfortunate if patients discontinued their use as a panic response to the animal test findings. In the case of reserpine, for example, the hazard to health from untreated hypertension (high blood pressure) far exceeds an unproved risk of cancer."

Testing of common drugs for cancer-causing potential is in the public interest, but the NCI should conduct confirmatory studies in which the dose and duration of administration more closely approximate the usual human exposure, he said.

Safety Criteria Outlined For Blood Pressure Devices

During a recent workshop sponsored by the National Institute of Health and other organizations, representatives of the medical professions, government, industry and consumers recommended the adoption of national safety and performance criteria for blood pressure measuring devices.

The objective of the workshop was to expedite the

development of standards to be used by industry, government, the health care professions and consumers to help assure the accuracy, reliability and safety of the devices.

Other organizations sponsoring and participating in the workshop were the American College of Cardiology, American Heart Association, American Medical Association, Association for the Advancement of Medical Instrumentation, Food and Drug Administration (Department of Health, Education and Welfare) and the National Bureau of Standards (Department of Commerce).

Among the recommendations by conference participants were: (1) manufacturers should include information on the care and maintenance of the devices and information on ways in which consumer devices may be checked for accuracy and reliability; (2) manufacturers should clearly indicate the durability characteristics of these devices and how they can be affected by environmental conditions; (3) clinical users and consumers should be instructed on how to use the devices and it should be made clear that the interpretation of the measurement can only be made by a physician.

The recommendations of the conference will be studied by a national standards organization.

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DATELINE

Inflation Effects Described Washington, DC - "U.S. News and World Report," examining 25 years of inflation, states that \$10,000 invested in the stock market in 1954 would be worth \$12,883 today; the same amount invested in farmland would have grown to \$24,972; but \$10,000 invested in a 25-year Treasury bond in 1954 would have been eroded to its present value of only \$3,760, considering inflation's effects. Since 1954, living costs have jumped 166%, while the dollar's value has dropped to 38 cents.

Improprieties Cited At Blood Bank Washington, DC - The FDA has charged that one of the nation's 10 largest blood banks has made "significant life-threatening errors," including distributing hepatitis-infected and mislabeled blood, failing to keep accurate records, overbleeding some donors, and failing to use safe and sterile procedures to test blood. The director of the Florida blood bank, which relies on 70% paid donors, resigned in the wake of the investigation.

AMA Urges More Home Health Care Chicago, IL - The American Medical Association is encouraging wider use of home health care as an alternative to the hospital or nursing home. Cost savings achieved in two programs were cited. One, in Philadelphia, saved an average of 11.2 hospital days over a three-year period with savings of \$4.6 million. A Connecticut program reported saving 9 hospital days and \$4 million. Besides cost considerations, patients may benefit from increased independence.

ANA President Addresses Nurses Jackson, MS - The president of the American Nurses' Association spoke at the recent annual convention of the Miss. Nurses' Association. She described successful efforts to restore funding to nursing education and research programs which had been the target of proposed slashes by President Carter, reported that the Bureau of Labor Statistics projects an increase of 240,000 nursing jobs by 1985, and said ANA will work for enactment of national health insurance.

U.S. and U.S.S.R. Collaborate New York, NY - The U.S. and the U.S.S.R. have begun formal collaboration in research on eye diseases. In announcing the international approach, HEW Secretary Califano stated, "the collaboration comes at a time when experts are estimating that the number of blind people worldwide, now estimated at 40 million, could double by the end of this century." Initial projects include laser treatment of glaucoma, research on retinal degenerations and studies of cataract.

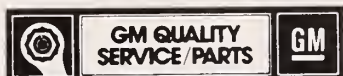
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Article Describes Chinese Medical System

A new analysis of the Chinese health system, based on previously unavailable data, reveals that while the Chinese have made monumental strides in improving health status and providing services in even the remotest regions, their system offers little that is transportable to the United States or other countries.

The reason is the Chinese health system is a product of its overall economic policies that shape all aspects of Chinese life. While the nation's achievements in health care are noteworthy, the transplantation of China's striking achievements to the United States or other countries is unlikely to occur in the absence of the economic policies which underlie it.

This conclusion is presented in an article appearing in a recent issue of the *New England Journal of Medicine* by Robert Blendon, a vice president of the Robert Wood Johnson Foundation and a recent visitor to China. As a health economist he obtained previously unavailable information on the extent of Chinese health insurance, health manpower and expenditures, and numbers of hospital beds.

The article describes such factors as low cost of Chinese medical care, distribution of physicians and other health workers to isolated areas of the country, and health financing plans for workers, and explains how they are tied to China's economic policy. Such principles as compulsory assignment of professionals, emphasis on low technology medical care, financing of health care for two-thirds of the population which is totally dependent on the sale of each commune's crops and output from its light industry, and the use of soldiers to provide medical care to civilians living in remote areas are characteristics of the Chinese medical system.

Diabetes Fellowships Are Available

The Juvenile Diabetes Foundation has made available postdoctoral fellowships in diabetes research for the funding year beginning July 1, 1980.

Stipends range from \$12,000 to \$17,000, and the fellowships offer research allowances of \$3,000.

Completed applications must be mailed before Oct. 1, 1979. Applications may be obtained from the Grant Administrator, Juvenile Diabetes Foundation, 23 E. 26th St., New York NY 10010. Telephone (212) 889-7575.



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In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

“The correlation of spasm relief and drug given was excellent.”

*This drug has been classified “probably” effective in treating functional bowel/irritable bowel syndrome

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective.

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis, myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with Autonomic neuropathy, Hepatic or renal disease, Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention, blurred vision and tachycardia; palpitations, mydriasis; cycloplegia, increased ocular tension, loss of taste, headache, nervousness, drowsiness; weakness, dizziness; insomnia, nausea, vomiting; impotence, suppression of lactation; constipation, bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage. Bentyl 10 mg. capsule and syrup: *Adults* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20mg. *Adults* 1 tablet three or four times daily. Bentyl Injection: *Adults* 2 ml. (20mg) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine[®] (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

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Forty Charged With Fraud

Forty providers, including 18 physicians, have been barred from the Medicare-Medicaid programs as a result of their criminal convictions for abusing the programs, the Health, Education and Welfare Department has announced.

The 40 providers convicted over the past year and a half include 18 physicians, three doctors of osteopathy, six chiropractors, 10 dentists and two podiatrists. Another 16 providers, including three physicians, have been excluded from participating in Medicare either because of court convictions or findings by HEW that they have been engaged in fraudulent or abusive practices.

The names of the health care practitioners have been referred to their respective state medical licensing authorities for appropriate action. None of the providers are located in Mississippi.

Childhood Cancer Course Is Scheduled

"Status of Curability of Childhood Cancers" will be the topic of the 24th annual Clinical Conference to be held in Houston at the Shamrock Hilton Hotel, Nov. 8-10, 1979.

The conference will focus on the reality of cure. It will touch on all aspects of childhood cancers including psychological and medical costs of cure, biological criteria of cure, prevention, therapy and etiology, especially genetic aspects. The present and future status of treatment of childhood Hodgkin's disease, non-Hodgkin's lymphoma, acute lymphocytic leukemia, neuroblastoma, brain tumors, bone cancers and solid tumors will be discussed.

For additional information write: Stephen C. Stuyck, Information Coordinator, M. D. Anderson Hospital and Tumor Institute, Houston, TX 77030, or call (713) 792-3030.

AAP Annual Meeting Is Set for October

Drug abuse, infant nutrition, sports medicine, adolescent homosexuality, child development and learning disorders will be among the topics discussed when the American Academy of Pediatrics holds its 48th annual meeting Oct. 13-18, in San Francisco.

Meeting in conjunction with the AAP meeting will be the National Association of Pediatric Nurse Associates and Practitioners and the Society for Adolescent Medicine.

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ORIGINAL PAPERS

Anosmia and Primary Amenorrhea In a Young Woman

G. WILLIAM BATES, M.D., WILLIAM R. RAULSTON, M.D.,
NEIL S. WHITWORTH, Ph.D., and WINFRED L. WISER, M.D.

A DEFINITE, yet poorly understood relationship exists between olfactory function and sexual function. In animals, olfactory deprivation will alter mating behavior¹ and destruction of the olfactory tracts leads to a change in hypothalamic-pituitary-gonadal function.² In man, a syndrome of anosmia and hypogonadotropism was first described by Kallmann³ in a young male (the Kallmann syndrome) and was later described by DeMorsier⁴ in a female. Although the disorder is rare in humans, it occurs with greater frequency in males than in females.⁵ In this report we present a young woman with anosmia and primary amenorrhea.

Case Report

A 31-year-old Caucasian female was referred to the University of Mississippi Medical Center for evaluation of primary amenorrhea and incomplete secondary sexual development. She had been a tall, thin child. At age 12 she had a growth spurt, early breast budding, and the appearance of axillary and pubic hair. However, she never menstruated. During her late teen years she sought medical consultation for amenorrhea and was placed on a course of oral contraceptive steroids to induce uterine bleeding. She experienced withdrawal bleeding but discontinued therapy because of associated nausea and vomiting.

As she was now contemplating marriage, she again sought medical advice for her primary

Anosmia and hypogonadotropic-hypogonadism is rare in females, but the prognosis for normal sexual development and reproductive success is excellent, as described in this case report. The authors maintain that testing of olfactory function should be included in the examination of patients with pubertal or reproductive failure.

amenorrhea. Aside from her complaints of incomplete secondary sexual development and amenorrhea, she was concerned about her functional capability as a sexual partner and her prospects for becoming pregnant. She had no history of abnormal hair growth, galactorrhea, lack of energy, depression or other symptoms suggesting endocrine disorders. Since early childhood she had not been able to smell, and her taste discrimination was limited to sweet, sour and salt. These findings had not been documented previously by a physician.

On physical examination she was a tall, slender, attractive female who appeared younger than her stated age. Blood pressure was 110/70 mm Hg, pulse 68 beats per minute, height 66 inches, weight 114 pounds. The skin was smooth and clear; the hair was normal in texture and distribution with a normal complement of axillary and pubic hair; there was no

From the Department of Obstetrics and Gynecology, University of Mississippi Medical Center, Jackson, MS; Dr. Raulston is with the Hattiesburg Clinic P.A., Hattiesburg, MS.

acne. The examination of the head, ears, eyes, nose and throat was normal except that she was unable to smell coffee, rubbing alcohol or perfume.

The breasts were small, almost infantile in shape and size. The nipples were slightly elevated on the chest wall, and there was a slight amount of ductile tissue palpable in the lateral portion of the breasts. These physical findings were consistent with Tanner state II⁶ (early pubertal) development. There was no galactorrhea.

On pelvic examination the external genitalia were developed to adult proportions and were covered with a normal amount of pubic hair. The vaginal introitus was smooth; the vaginal mucosa was pale, smooth and nonrugated. The cervix was infantile in size and contained no endocervical mucus. The uterus was infantile, anteflexed and mobile. The ovaries were not palpable. The remainder of the physical examination was normal.

Laboratory studies were reported as follows: Follicle stimulating hormone (FSH) 4.9 mIU/ml (normal adult female — 6 to 30 mIU/ml); lutenizing hormone (LH) 7.2 mIU (normal adult female — 2 to 30 mIU/ml); and prolactin 6.2 ng/ml (normal 5 to 25 ng/ml). The buccal smear was Barr body positive indicating a female karyotype.

With the findings of anosmia, primary amenorrhea, sexual infantilism and hypogonadotropic-hypogonadism, a diagnosis of Kallmann syndrome was made. She was initiated on a course of conjugated equine estrogens (Premarin), 1.25 mg orally *b.i.d.* After six weeks of this therapy her breasts had increased to Tanner stage III developmental phase; the vaginal mucosa had become thick, pink and rugated, and there was abundant endocervical mucus. Plasma gonadotropins were repeated after this short course of estrogen therapy and had not changed from the values found prior to the initiation of treatment (FSH — 2.2 mIU/ml, LH — 6.7 mIU/ml).

Discussion

Anosmia and hypogonadotropic-hypogonadism is a rare disorder in females. It may result from a genetic defect or from environmental exposure. In males it is thought to be either a male-limited autosomal dominant or an X-linked recessive disorder,³ but in females the inheritance pattern has not been established since there is an insufficient number of these women who have become pregnant to provide an adequate genetic study of the offspring.

The neuroendocrine interaction between the ol-

factory tract and the hypothalamic-pituitary axis has not been elucidated. Yet, disorders of olfaction, either congenital or acquired, can result in sexual infantilism and reproductive failure. In animals the olfactory sense plays an essential role in mating behavior as well as in the cyclic stimulation of the gonad by the hypothalamic-pituitary axis. Animals and humans secrete volatile organic acids (pheromones) that stimulate the olfactory sensory receptors.⁷ Thus, the olfactory apparatus appears to have a direct affect on sexual maturation and reproductive function, as well as an indirect affect on mating behavior that is mediated by the perception of other animals or humans in estrus.

From the results of clinical investigations of men and women with anosmia and sexual dysfunction, it appears that the basic defect resides within the hypothalamus. When the hypothalamic hormone, lutenizing hormone releasing hormone (LH-RH), is administered to subjects with this disorder, the pituitary gland responds by secreting the gonadotropins, FSH and LH.⁸ Moreover, the gonad is functionally intact in these subjects as ovulation has been induced and term pregnancies have been achieved following the administration of exogenous gonadotropins.⁹

The major concerns of this patient were her capacity for normal sexual function and her capability for successful reproduction. Despite the seemingly remote chance of becoming sexually mature and then becoming pregnant, the prognosis for normal sexual development and reproduction is excellent in women with the Kallmann syndrome. The response this woman showed to exogenous estrogen therapy manifested by breast development and internal genital maturation was prompt, and we anticipate that adult secondary sexual development will be complete within a year. We further expect that ovulation can be induced in this woman by the administration of gonadotropins when she desires pregnancy.

It is interesting to note that even though the estrogen responsive tissues (breasts, vagina, cervix and uterus) were stimulated by the administration of estrogen, there was no elevation of her pituitary FSH or LH. This finding suggests that the gonadal steroids (estrogens, androgens and progesterone) exert their feedback effects through the hypothalamus and higher brain centers rather than directly through the pituitary gland.

In men and women with primary or secondary reproductive failure, the simple testing of olfactory function at the time of physical examination may lead to the early diagnosis of Kallmann syndrome.

Summary

By physical examination and laboratory evaluation, the diagnosis of Kallmann syndrome was confirmed in a 31-year-old woman with anosmia and primary amenorrhea. Although this disorder is rare in females, the prognosis for normal sexual development and reproductive success is excellent. Inquiry into olfactory function and testing of olfactory function should be a part of the examination of patients with pubertal or reproductive failure. ★★

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Acknowledgement

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“Social Security is a sort of chain letter with socially redeeming features. For decades the system paid the expenses of relatively few retirees by lightly taxing relatively many workers. But now the chain letter is running out of new addresses; a slowly growing work force will be pressed to pay the bills of a rapidly growing pool of pensioners.”

New York Times

Radiologic Seminar CXCIII: Masquerade of Stroke as an AVM

RICHARD B. ELLISON, M.D.
Jackson, Mississippi

THE CLINICAL PRESENTATION of a patient who has suffered a stroke is often confusing. Although clinical findings may suggest that the patient has suffered a stroke, historical information from the patient, family and friends can be conflicting and sometimes amazingly vague. Comments such as: "I can't remember when he stopped moving his right side. He never did move it much; we just brought him in because he stopped eating" are not uncommon, even from close relatives.

Computed tomography has become the initial diagnostic procedure of choice in evaluating the intracranial status of patients with suspected strokes but with confusing neurologic presentations. While the accuracy of CT in the diagnosis of cerebral infarction should be in the range of 90% or better in a stroke sustained 21 to 28 days earlier, the CT picture may be considerably less informative in the first two days.¹

An acute ischemic stroke generally presents at CT as a zone of decreased x-ray absorption (CT numbers of plus 5 to plus 15) due to brain edema, in contrast to normal brain CT numbers of plus 15 to plus 20.² Unfortunately the CT scan in an early infarct (first 48 hours) may be variable and can mimic neoplasm, inflammation, demyelinating disease, brain contusion or arteriovenous malformation.² At times the pre contrast CT scan will be normal, or very nearly normal, while the post contrast scan shows enhancement simulating an AVM.

Two examples of cerebral infarctions simulating arteriovenous malformations are presented. In one of the instances, even the cerebral angiogram failed to resolve the dilemma with certainty.

In case number one, the pre contrast CT scan was normal while the post contrast scan showed striking enhancement in the left posterior parietal-occipital region, suggesting an AVM. A subsequent angiogram, however, showed occlusion of the left middle cerebral artery, indicating a stroke.



Figure 1. Pre contrast CT scan, Case 1, interpreted as normal.

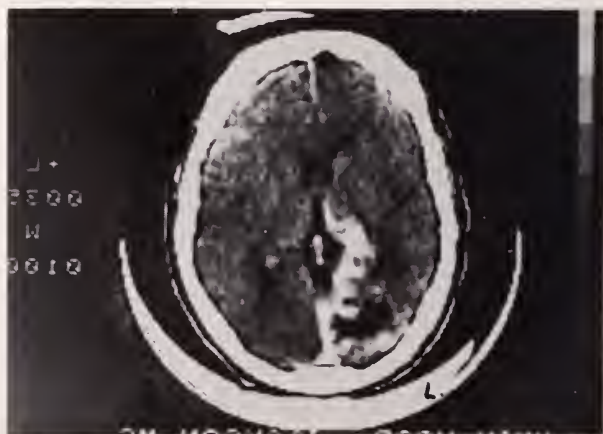


Figure 2. Post contrast CT scan, Case 1.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, St. Dominic-Jackson
Memorial Hospital, Jackson, MS.

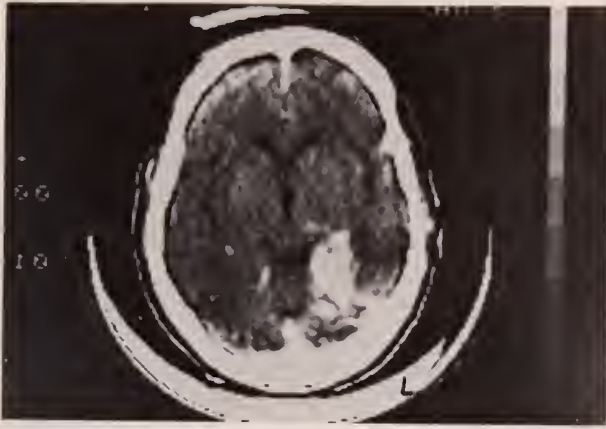


Figure 3. Post contrast CT scan, Case 1.

In case number two the pre contrast CT scan showed a right hemispheric mass effect and a slight nonuniform increase in x-ray attenuation. These findings were consistent with neoplasm, stroke or hemorrhage from an AVM. The post contrast scan showed such striking enhancement of cerebral gyri that these structures were interpreted as large ser-

piginous vessels of an AVM. A subsequent cerebral angiogram showed no arterial occlusion and revealed a moderate, irregular, right cerebral hemispheric stain with several large superficial veins filling during the late arterial phase. The possibilities of either a venous angiomatous or capillary telangiectatic type of vascular malformation were still considered more likely than a stroke (mostly because of the "AVM-like" appearance of the CT scan). A follow up CT scan, however, showed a large zone of edema in the right mid parietal region with only a thin rim of enhancement medially; a typical late ischemic stroke pattern which correlated nicely with the patient's improving clinical status.

An ischemic stroke can cause intense post contrast enhancement on a CT scan since hypoxia is the most potent cerebral vasodilator known.³ The result is intense arteriolar dilatation surrounding the hypoxic region of brain with the dilatation subsiding as the necrotic brain is resorbed. This phenomenon has been called the "luxury perfusion syndrome" by Lassen⁴ and is shown on angiograms as a vascular "stain" with early venous filling.

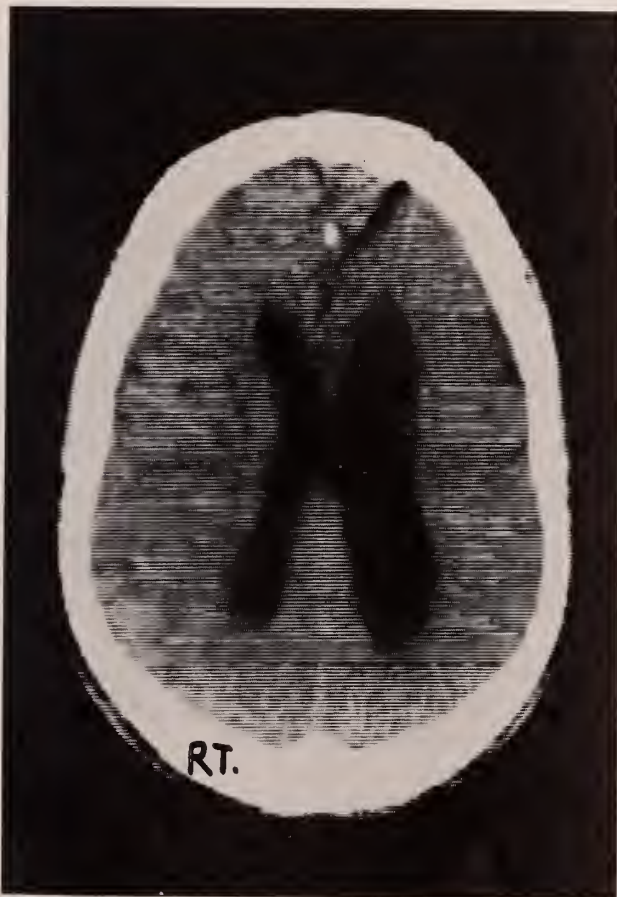


Figure 4. Case 2, pre contrast brain CT scan.

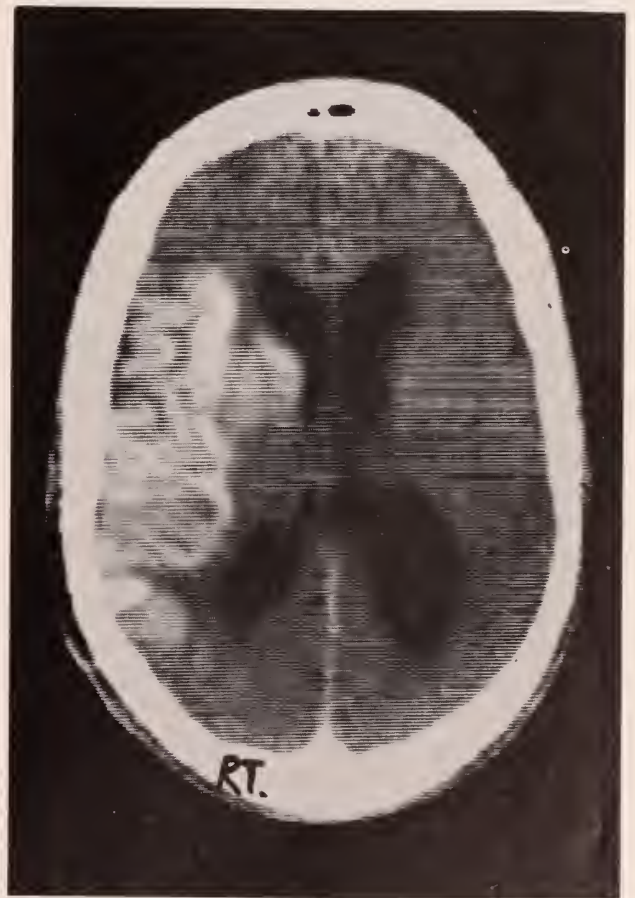


Figure 5. Case 2, post contrast CT scan.

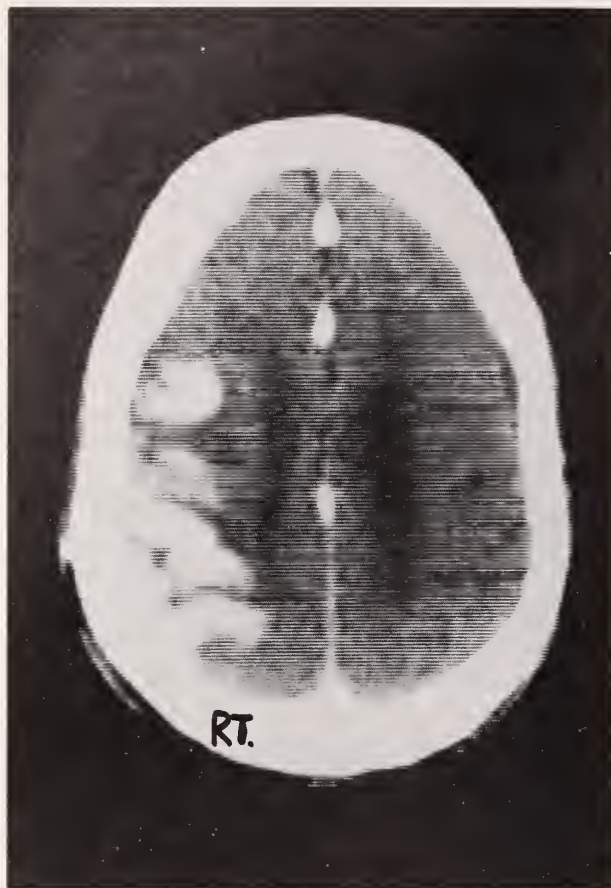


Figure 6. Case 2, post contrast CT scan.

In arteriovenous malformations and in some malignant tumors, the early venous opacification results from abnormal arteriovenous communications. Arterial blood enters the venous system without passing through the capillary phase. The veins are usually densely opacified in the early arterial phase.⁵

Investigators have been unable to demonstrate such direct arteriovenous communications in patients with cerebral infarction,⁶ and it is postulated that abnormally rapid local flow through the entire arterial-capillary-venous system accounts for the early venous drainage in infarction.⁴

In the clinical situation, it is especially important to note that with cerebral infarction, the early filling veins are almost always opacified in the late arterial phase and are usually less dense than those seen in an AVM. Further, Taveras indicates that arterial occlusions are demonstrated by angiography in only about half the patients who have ischemic strokes. Most



Figure 7. Case 2, Cerebral angiogram showing parietal "stain" and veins filling during late arterial phase.

infarcts are caused by emboli and it is known that emboli composed of red thrombotic material will fragment quickly with destruction occurring by lysis in six to twenty-four hours. If the embolus is composed of fibrin and platelet aggregates, it will break up and disappear within minutes to within one to two hours.¹ The result is brain tissue death with patent arteries leading into the zone of infarction.

It is noted on the angiogram in case number two that no arterial occlusion is evident and, though an impressive "stain" is present with arteries and veins filled at the same time, early draining veins do not appear until late in the arterial phase.

As later generation CT scanners which offer improved brain detail, faster scanning times and decreased motion artifacts become more generally available, detection of more subtle zones of decreased x-ray attenuation in the ischemic brain should become more accurate. Remaining on guard however, against the stroke "trying to masquerade as an AVM" will help us avoid this pitfall. ★★★

969 Lakeland Drive (39216)

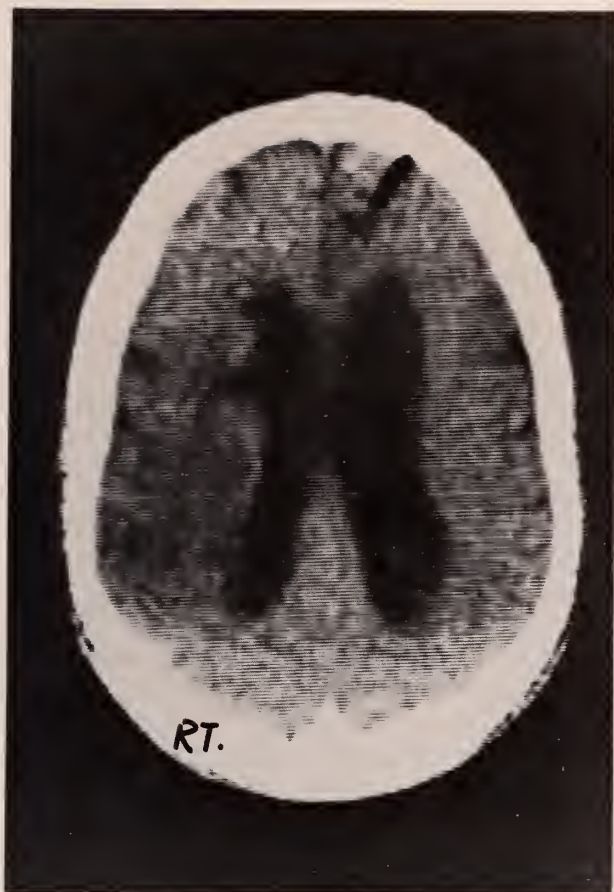


Figure 8. Case 2, late pre contrast CT scan, one month after stroke.

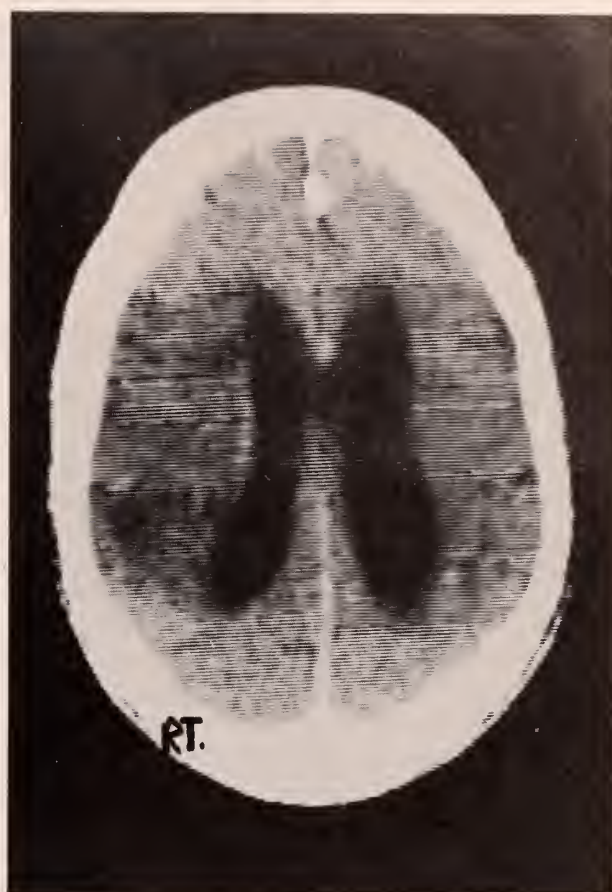


Figure 9. Case 2, late post contrast CT scan, one month after stroke.

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Maternal Mortality in Mississippi: 1975-76

WILLIAM B. WIENER, M.D.

Jackson, Mississippi

IN 1957, the Mississippi State Medical Association (MSMA) established a committee to survey and study as a continuing research and educational program, the maternal mortality cases occurring each year in the state of Mississippi. The Committee on Maternal and Child Care has recently completed its study data for the calendar year 1975-76.

Death certificates from the Mississippi State Board of Health furnished to the committee indicate that there were 5 and 8 maternal deaths in Mississippi in 1975 and 1976, respectively. The number of live births to Mississippi residents totalled 43,336 in 1975 and 42,983 in 1976, thus continuing a downward trend in live births begun in 1972 and probably reflective of a number of sociological factors to include an increase in sterilization, terminations of pregnancies and a trend towards smaller families.

The maternal mortality rate for Mississippi residents (maternal deaths per 100,000 live births) was 13.8 in 1975 and 18.6 in 1976. This was a considerable improvement over the 1973 and 1974 death rates which were 26.9 and 27.2 respectively and continued an overall downward trend in the maternal mortality rate in Mississippi. The maternal mortality rate for the United States in 1975 and 1976 was 12.8 and 12.3 respectively.

Techniques of obtaining and reviewing information on maternal deaths have not changed appreciably during the 18 years of study. The questionnaire type of inquiry has been exclusively employed. No "on the spot" investigations of hospital records or interviews of physicians or hospital personnel have been conducted except under rare circumstances involving hospitals in Jackson. The data sheet used was developed by the committee before the study began and has undergone only minor changes since

then. One of the data sheets, together with a letter from the chairman of the committee, is sent to the physician who last attended the patient. He or she is asked to complete and return the data sheet and add any pertinent information in a supplementary note. If the physician does not reply, two followup letters are sent at appropriate intervals. In some cases, personal attempts have been made by members of the committee, the State Board of Health, officers of the association, or local obstetricians to obtain information. Letters requesting additional information have occasionally been sent to the responding physician by the committee, if it seemed likely that he could supply further information which might be of value.

Following receipt of the data sheet and other information, all identifying marks are removed so that anonymity is preserved. A copy of the data sheet is then sent to a member of the committee for review prior to the next meeting. At the meeting of the committee the case is summarized by the member who has studied and evaluated it according to the criteria set out in the AMA "Guide for Maternal Death Studies." The evaluations are discussed by the committee, agreed to or voted on if there is a division of opinion, and then furnished to the attending physician.

The committee studied 11 maternal deaths occurring in 1975 and 1976. All replies to the committee's inquiries are evaluated as to their usability (see Table I) and usable replies are classified according to the adequacy of the data furnished (see Table II). In order to receive the highest rating, which is 5, the questionnaire for the committee's study must be completely filled out, a relevant explanatory note attached and an autopsy report included if available. Cases rated 1 or 2 are often difficult to evaluate because of gaps in data received.

Following the AMA "Guide for Maternal Death Studies," the committee classifies maternal deaths as either being direct obstetric deaths or indirect obstetric deaths. Direct obstetric deaths are defined by the Guide as those in which the cause of death is due to a condition directly related to the pregnancy such as hemorrhage, toxemia, infection, anesthesia

Chairman, Committee on Maternal and Child Care.
Committee members — William B. Wiener, M.D., Jackson;
W. W. Walley, M.D., Waynesboro; W. E. Godfrey, M.D.,
Natchez; George J. Nassar, M.D., Greenwood; K. Ramsay
O'Neal, M.D., Hattiesburg; Wendell H. Stockton, M.D.,
Amory.
Consultants — Catherine G. Goetz, M.D., Jackson (pathology);
Curtis W. Caine, M.D., Jackson (anesthesiology).

TABLE I
STUDY MATERIAL

	1975		1976	
	NO.	PERCENT	NO.	PERCENT
Total cases	5		8	
Replies received	3		8	
Replies usable	3	60	8	100

TABLE II
ADEQUACY OF DATA

Category	1975		1976	
	NO.	PER CENT	NO.	PER CENT
5	1	33.3	1	12.5
4	0		5	62.5
3	0		0	
2	2	66.6	1	12.5
1	0		0	

TABLE III
CAUSES OF DEATH

	1975		1976	
	NO.	PER CENT	NO.	PER CENT
Direct	2	66.6	7	87.5
Indirect	1	33.3	1	12.5
Undetermined	0		0	

or vascular disease. Indirect obstetric deaths are those resulting from disease present before or developing during pregnancy but was obviously aggravated by the physiological effects of the pregnancy and caused the death. Classification of maternal deaths studied by the committee in 1975 and 1976 as to direct or indirect deaths is shown in Table III.

The direct obstetric deaths studied by the committee have also been classified as to cause in Table IV. As noted therein, hemorrhage and toxemia accounted for 5 of the 9 direct obstetrical deaths occurring in 1975 and 1976.

Again, following the AMA "Guide for Maternal Death Studies" the committee determines the avoidability of those maternal deaths studied (see Table IV). Avoidability is judged in an ideal academic sense. This concept involves three assumptions. First, the physician possessed all the knowledge currently available relating to the factors involved in the death. Second, by experience, he had reached a high level of technical ability. Third, he had available to him all the facilities present in a well

organized and properly equipped hospital. Because of the austerity of these criteria, it is then desirable to determine avoidable factors involved in the death rather than label the death preventable and this is done in Table VI. As noted therein professional factors were involved in 7 of the 8 deaths classified as avoidable by the committee in 1975 and 1976.

TABLE IV
CAUSES OF DIRECT OBSTETRIC DEATHS

	1975		1976	
	NO.	PER CENT (OF ALL DEATHS STUDIED)	NO.	PER CENT (OF ALL DEATHS STUDIED)
Hemorrhage	2	66.6	1	12.5
Toxemia	0		3	37.5
Infection	0		1	12.5
Vascular Accident	0		1	12.5
Anesthesia	0		1	12.5

TABLE V
AVOIDABILITY

	1975		1976	
	NO.	PER CENT	NO.	PER CENT
Avoidable	2	66.6	6	75
Non-avoidable	1	33.3	1	12.5
Undetermined	0		1	12.5

TABLE VI
AVOIDABLE FACTORS

	1975		1976	
	NO.	PER CENT	NO.	PER CENT
Professional	2	66.6	5	62.5
Hospital	0		0	
Patient	0		2	25
Undetermined	0		1	12.5

Maternal mortality in Mississippi continues to decline; this is no doubt reflective of a number of factors, including better obstetrical care for maternity patients and a lower birth rate. Also, hopefully the decision of the Mississippi State Medical Association to establish a committee in 1957 to survey, study and report maternal mortality cases has had some impact.

★★★

500-G East Woodrow Wilson (39216)

Find Out What Your Patients Want: Conduct a Survey

HELEN GUDGEL

Family Health Center
Spokane, Washington

INDUSTRIES AND BUSINESSES often find answers to problems by querying their customers. For example, many banks have recently done successful surveys to find out what consumers want from them. Customers do respond, and often their suggestions can be implemented in the bank services.

When did you do your last survey in the group for whom you work? Or have you ever taken the time to consult your customers — the patients. There are many types of surveys which could be done, and your patient questionnaire should cover the areas in which you need and seek answers.

Recently, the Family Health Center in Spokane, Washington, conducted a survey in our two-year-old family practice office. With the results obtained, we were able to take another look at our appointment scheduling and time allotments. Our patients now do not need to wait as long, and the patient education materials distributed by our office are indeed making the patient feel that questions regarding their illnesses and their treatments are being explained adequately.

We distributed 150 questionnaires, and about 100 were either filled out in the office or returned by mail, unsigned. One of the forms returned by mail seemed to make the entire project worthwhile. Following is the patient's reply:

"I think this is just fantastic. I greatly appreciate your concern and responsiveness. Of the doctors I know or have been to, your practice alone does not seem to be afflicted with this prevailing attitude of 'medical arrogance.' I 'shop' for medical service exactly as I do for any other service that I pay for, which, in other cases is considered 'smart shopping,' but in the case of doctors is considered 'doctor hopping.' I just don't buy that, and neither do most of my friends. We are all young mothers, and between obstetricians, pediatricians, and family practitioners, we daily make decisions affecting a lot of people's salaries.

"I'm glad your practice seems to reflect your

awareness of this. The day of the 'patient in awe' and 'no questions asked' is gone. We're concerned, aware, and need to 'know' and we shall 'doctor hop' (if you will) until we find people like you! . . . thank you for caring about us.'"

Dear Patient,

Has our treatment of your illness been satisfactory? Do you feel that our employees treat you courteously and handle your records and bills properly? Is our nursing staff professional and are you satisfied with our services?

Won't you please take a minute to answer the questions printed on this form. Your comments — good or bad — will remain anonymous of course. Please return this form to the receptionist desk or by mail if you prefer.

(a) Were you treated courteously by our employees?

Yes ____ No ____.

(b) Is this your first visit to our office?

Yes ____ No ____.

(c) Was it easy to get an appointment with us?

Yes ____ No ____.

(d) Were we able to see you at the appointed time?

Yes ____ No ____ . If not, how long did you have to wait?

(e) Did you feel that the doctor was genuinely interested in you as a person?

Yes ____ No ____.

(f) Did you receive adequate explanation regarding your illness and the treatment?

Yes ____ No ____.

(g) Were instructions given by our nurses helpful and clearly stated?

Yes ____ No ____.

Do you have any other comments or suggestions which might help this office improve its service to you ____

Signed _____ M.D.

Figure 1. Patient Questionnaire and Survey

The questionnaire shown in Figure 1 was typed on our stationery and copied on colored stock. ★★

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The President Speaking

MSMA Views Patient's Health Needs

GERALD P. GABLE, M.D.
Hattiesburg, Mississippi

Last month I shared with you the results of a public opinion poll as to how health care appears in the eyes of our patients. This month I would like to share with you some of the health needs of Mississippi as viewed by our association.

At our annual meeting last year, the House of Delegates directed the association to study the health care needs of the state and develop an official position paper in this regard. A special ten-member study committee was appointed from all geographic areas of the state with particular emphasis on primary care and non-urban representation. The committee was chaired by Dr. Jack Atkinson of Brookhaven, a past president of our association. Also represented on the committee were the Dean of the University of Mississippi Medical School and the Director of the State Board of Health. The committee had before it the results of the public opinion poll which I mentioned last month, and in addition conducted an in-house poll of MSMA membership as to what health needs they saw in their individual patients.

A review of the committee study shows that socioeconomic factors play a very important part in the health care needs of our state. We have 2.2 million people living in a largely non-urban environment, with 25% of the families having incomes of less than \$3,000 as compared to 10% in this category nationwide. Some 25% of our population has no third party coverage for their medical care, either private or governmental. Our state has the highest infant mortality rate in the nation with 25% of the infants born to unwed mothers, and our physician, dentist and nurse population ratios are all below the national average. Serious nutritional deficiencies and substandard housing and sanitation are problems for a significant portion of our population.

What can we do to correct some of our problems? The committee felt that one of our greatest needs was in health education and preventive medicine. A planned sequential program of health education by qualified personnel should be instituted in our school system for students from the first through the twelfth grades with emphasis on identifying and establishing good health habits. Since roughly 25% of the children born in Mississippi are born to teenage and unwed mothers and are therefore in a higher risk group, we likewise need to attack our problem of high infant mortality rates with sex education at the school level.

Another area of need recognized by the committee was in automobile accidents. Over 50% of the auto accidents in 1977 in our state were due to "driver failure" rather than mechanical failure. Over 400 deaths were alcohol related. Our present law allows for a .15% alcohol level of intoxication compared to 47 other states which allow only .10%. Action here and a requirement for periodic driver recertification to remove the physically and mentally impaired from the roads would do much to reduce our accident rate.

The committee also addressed itself to several other areas of health needs, such as the shortage of physicians in rural areas, prevention of dental caries with fluoridation of our water supplies, consumer education on health insurance coverage, health screening programs, and the consolidation of all state health programs to coordinate the many efforts of federal, state and local programs. The State Board of Health should serve as the focus for the latter effort and a reorganized State Board of Health, composed of qualified consumers and providers of health care serving staggered terms, should be appointed by the governor. State licensing authority over individual health professional groups should reside in boards composed of representatives nominated by those individual groups.

It is evident that we have many needs to fulfill to bring our state forward in medicine. With your help and cooperation I am sure that we can do it.

EDITORIALS

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

VOLUME XX, Number 8

AUGUST 1979

Nuclear Waste Problem Requires Caution

Knowledgeable people are debating the issue of nuclear waste at present. Perhaps another generation will be able to neutralize or even utilize nuclear waste to its full potential and complete dissolution, but until that time it seems apparent that we best proceed with utmost caution. Our life styles must change in the near future unless discoveries are made that are not foreseen at present. Perhaps even now we could begin weaning away from useless energy waste.

The very nature of our government, however, makes this more difficult because politicians are less likely to deny their constituents the creature comforts to which they have become accustomed.

W. MONCURE DABNEY, M.D.

Editor

Crystal Springs, MS

LETTERS

SIRS: The recent nuclear power incident at Three-Mile Island served to remind me again of a very significant editorial by Dr. Thomas V. Brooks, Jr., professor and chairman of the Department of Preventive Medicine, University of Mississippi Medical Center, which was published in June 1975 issue of this journal.

Dr. Brooks wrote me a few weeks later that he had heard from only three or four physicians in Mississippi concerning this editorial. The level of interest must surely be greater now, in the aftermath of the Brown's Ferry fire in nearby Alabama, and the near tragedy at Three Mile Island.

Unfortunately, all the facts developed by Dr. Brooks in his 1975 article are still true (only more so), as indicated in *Science News* (February 25, 1978):

"Results of two related epidemiological studies

show a small but statistically significant correlation between exposure to low levels of ionizing radiation and at least two types of cancer."

This article should be reviewed by all interested in the subject. It reinforces facts known for many years by older physicians like myself. In early days, x-ray machines were not properly shielded. An AMA editorial commented (sometime around 1940) that the incidence of leukemia was ten times higher in x-ray workers than in the general population. This was forcefully brought to my attention when our professor of radiology at my hospital, a first-rate teaching institution, died of leukemia at the age of 50 or so. Since then, the story of cancer and genetic defects occurring after atomic explosions such as those at Hiroshima have become well known. Stray radiation in x-ray departments was known as predisposing to leukemia some 40 years ago.

Less well known is the problem of increasing contamination of our entire biosphere with radioactive material. When Dr. Brooks wrote his article in 1975, there was an estimated 80 million gallons of plutonium waste, scattered over the entire nation in leaky tanks, gradually seeping into ground water. The current amount is 230 million gallons, and no method of safe disposal is even known. Reference is made to an article in *Nation*, March 5, 1977, entitled "Lethal Seepage of Nuclear Waste." I quote in part:

"Although leakage from nuclear wastes may be the main source of contamination, every phase of the nuclear fuel cycle — from mining of uranium ore to the reprocessing of spent nuclear fuel — releases radioactivity into the environment."

Speaking of the tremendous planned development of nuclear power, the writer comments:

"The conversion to clean, quiet nuclear power will, on the surface at least appear to be a good thing. . . . *The only drawback will be a steady rise in the cancer rate (and genetic birth deformities).*

But by the time the increase is noticed, it may be too late to do anything about it. Cancer already kills 370,000 persons a year in the U. S. alone. It would take many thousands of additional deaths from nuclear pollution to make a significant difference in the statistics."

Then, it would be too late.

The National Resources Defense Council has recently pointed out another part of the problem which is the question of the disposal of nuclear power plants, stating, "A nuclear power plant starts to die the day it goes to work. As a succession of atomic fuel cores is inserted, used, and extracted from the plant, the radiation level in the plant begins to rise."

This is no accident, but a normal part of the operation of the plant.

After approximately 30 years, the plant must be closed. Every nuclear plant suffers the same fate. It must be closed and sealed or dismantled. And guarded. Because scientists estimate that the poisoned structure will be a threat for at least 200 years, if not much longer. These inoperable plants cannot be dismantled and moved without great expense and enormous risk of exposure to surrounding areas, due to the thousands of tons of steel and concrete permeated with intense levels of radiation.

Sometimes the mothballing of a reactor isn't so easy. The Marcoule France reactor, which produced plutonium for French Nuclear Weapons, was shut down 10 years ago and placed under guard. But it has already developed cracks and is leaking radiation. It will have to be dismantled completely and entombed in concrete. Even then, the guards will have to stay alert for radiation.

With only a 30-year lifespan, the problem of "dead but dangerous" nuclear plants cannot be put off until later. Fifteen plants in the U. S. have already been closed, and their disposal is a major problem today."

At present, four nuclear reactors are scheduled to go "on line" around 1985 in Mississippi (two at Grand Gulf and two at Yellow Creek). This means that *in the year 2015 (only 36 years away) that these plants must be dismantled and buried at great expense, or we must seal off the entire acreage and mount guard for 200 years, until 2215.* Our nuclear power does not look so cheap under these circumstances.

For a significant overview of this entire problem, see *Time* (October 31, 1977) in an energy article entitled "The Atomic Global Garbage." It is pointed out that England, France, Japan and the Arab world are all struggling with the nuclear-waste problem and have yet to devise a way to resolve the issue.

Even nonmedical journals are beginning to sense the danger involved in our present folly, as in the *New Yorker* (April 16, 1979):

"In unleashing chain reactions, we have brought a cosmic force, virtually never found in terrestrial nature, onto the earth — a force that, both in its visible, violent form of nuclear explosions and in its invisible, impalpable form of radiation, is alien and dangerous to earthly life, and can, through damage to life's genetic foundation, break the very frame on which the generations of mankind are molded."

The call to physicians, who understand better than any other profession, the dangers of ionizing radiation, is loud and clear — *let us stop our present foolhardy course before it is too late.* This writer prefers to be remembered as one physician who spoke out against all nuclear power, this being a moral obligation (a Christian one also) with regard to our grandchildren and their descendants.

The action taken by three states in banning more nuclear power plants until the present waste is disposed of should be taken by the entire U.S.A.

It is my considered and, I hope, rational opinion that it would be best to close all nuclear power plants, and begin the long hard struggle of safely disposing of our 230 million gallons of plutonium waste (with a half-life of 24,000 years); of our many tons of spent uranium fuel rods; of our 15 presently "dead but dangerous" nuclear fuel reactors; and plan how to dispose of the 70 or so now in operation.

Perhaps, just perhaps, we shall be able to stop the release of ionizing plutonium and other wastes into our ground water supplies, our foodstuffs, our oceans, and our atmosphere before our background radiation rises to the level where the incidence of genetic mutations and radiation-induced cancer is doubled, tripled, or quadrupled. The recovery of this radioactive material is impossible with present known technology.

If every physician in the state of Mississippi were to write his congressman and two senators concerning this danger, perhaps we would get some delaying action in our headlong rush into nuclear proliferation. Many of us may want to join up with such groups as the Union of Concerned Scientists, or the National Resource Defense Council, the Sierra Clubs, or others. Perhaps we should have a group of physicians in this state who will help to alert the public to the real danger.

THOMAS W. WESSON, SR., M.D.
812 Brunson Drive
Tupelo, MS 38801

PERSONALS

GEORGE L. ARRINGTON, JR. and ROBERT J. CATER of Meridian announce the association of J. THOMAS BALZLI for the practice of otolaryngology at the Meridian Ear, Nose and Throat Clinic, P.A.

JANIS E. BURNS has opened her office for the practice of plastic and reconstructive surgery, hand surgery and head and neck surgery in Tupelo at 605 Garfield St.

SAM B. CARUTHERS was honored by the Grenada Exchange Club recently and was named to their "Book of Golden Deeds."

A. WALLACE CONERLY of UMC attended a board of trustees meeting of the National Board of Respiratory Therapy in Scottsdale, AZ.

MAXWELL C. COOKE and CALVIN T. HULL of Jackson announce the relocation of their offices for the practice of obstetrics and gynecology to Suite 1, 1900 Dunbarton St.

DANIEL P. DARE has associated with the Street Clinic in Vicksburg for the practice of orthopedic surgery, sports medicine and joint replacement.

GEORGE ELLIS of Tylertown has opened his general medical practice at 202 Medical Dr.

VERNER HOLMES of McComb was cited for his service on the Board of Trustees of the University of Mississippi Medical Center at UMC's commencement ceremonies in June.

L. GERALD HOPKINS of Oxford received the American Heart Association-Mississippi Affiliate's Gold Award at that organization's recent annual meeting.

THOMAS R. HOWELL of Laurel announces the opening of his office for the practice of general surgery at 120 S. 11th Ave.

EDGAR WARREN HULL has opened his office for the practice of internal medicine and medical oncology at Suite 304, Doctors Plaza Building in Pascagoula.

JULIAN T. JANES of McComb has been recertified by the American Academy of Family Physicians.

SOL E. JOHNSON of Moss Point announces the association of JOSEPH L. FAISON in the general practice of medicine.

RICHARD A. KNUTSON of Greenville recently addressed the American Physical Therapy Association's national convention on the subject of treatment of wounds with a combination of sugar and Be-

tadine. Collaborating on the research was LLOYD A. MERBITZ, also of Greenville.

NELL C. MOORE of Tupelo was recently named recipient of the Tupelo Altrusa Club's Woman of Distinction Award.

PATRICK PIERCE of Gulfport was guest speaker at the first Tulane Eye Alumni Day which took place at Tulane Medical School in New Orleans in June.

GLEN C. WARREN of Jackson announces the association of PATRICK L. LILLARD for the practice of neurological surgery, and the relocation of his office to 1900 Dunbarton St.

WILLIAM H. WALLACE announces his association with the Jackson Plastic Surgery Clinic, P.A. (HEBER C. ETHRIDGE, W. DOUGLAS GODFREY, WILLIAM O. BOBO and ROBERT ALLEN SMITH) for the practice of plastic and reconstructive surgery and surgery of the hand.

HOWARD C. FRIDAY of Jackson announces the association of EDWIN R. ORR, III, for the practice of internal medicine.

NEW MEMBERS

FULLER, RICHARD, Brookhaven. Born Brookhaven, MS, Sept. 6, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned and internal medicine residency, University Medical Center, Jackson, 1973-76; elected by South Central Medical Society.

KILEY, JOHN EDMUND, Jackson. Born New York, NY, Mar. 22, 1920; M.D., Harvard Medical School, Boston, MA, 1945; interned Albany Medical College, NY, one year; pathology residency Samaritan Hospital, Troy, NY, Jan.-July 1948; medicine residency Albany Medical College, NY, 1948-50; nephrology fellowship, Albany Medical College and Harvard Medical School 1951-58; elected by Central Medical Society.

RATLIFF, DONALD WAYNE, Belmont. Born Baldwin, MS, May 17, 1949; M.D., University of Mississippi School of Medicine, Jackson, 1975; interned UMC, Jackson, one year; family practice residency, same, 1975-78; elected by Northeast Mississippi Medical Society.

REID, SHELBY C., Corinth. Born Booneville, MS, May 10, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1958; interned University of Oklahoma Hospital, one year; surgery

NEW MEMBERS/Continued

residency, City Memorial Hospital, Winston-Salem NC, 1960-62; surgery residency, University of New Mexico, Albuquerque, 1961-64; surgery residency, St. Joseph Hospital, Lexington, KY, 1964-65; surgery residency, V.A. Hospital, Amarillo, TX, 1967-68; surgery residency St. Luke's Hospital, Bethlehem, PA, 1968-69; elected by Northeast Mississippi Medical Society.

DEATHS

JOFFE, IRWIN, Biloxi. Born New York, NY, Dec. 30, 1921; M.D., Tulane University School of Medicine, New Orleans, 1944; interned Springfield Hospital, Springfield, MA, 1946; pathology residency, University of Kansas Medical Center, Kansas City, 1951-57; pathology residency, V.A. Hospital and St. Mary's Hospital, Kansas City, MO, 1957-58; died May 3, 1979, age 57.

MORPHY, ABRAHAM NORAS, Long Beach. Born Carleton Place, Ontario, Canada, Feb. 8, 1901; M.D., Queen's University Faculty of Medicine, Kingston, Ontario, Canada 1926; interned, same, one year; died April 19, 1979, age 78.

SEALE, WILLIAM E., Memphis, TN (E-RET). Born Neshoba County, MS, Jan. 29, 1886; M.D., University of Louisville School of Medicine, Louisville, KY, 1912; residency, Tulane, New Orleans, 1936; died Feb. 18, 1979, age 93.

SHELL, FERD MORRISON, Laurel. Born Clarksdale, MS, Jan. 19, 1919; M.D., Tulane University School of Medicine, New Orleans, 1950; interned Charity Hospital, New Orleans, one year; ob-gyn residency, University Medical Center, Jackson, MS 1956-58; died May 27, 1979, age 60.

WARD, A. GAYDEN, Jackson. Born Brandon, MS, Nov. 21, 1906; M.D., Tulane University School of Medicine, New Orleans, 1931; interned University of Pennsylvania, 1931-33; medicine residency, King County Hospital, Brooklyn, NY, 1933; residency, University of Pennsylvania Hospital, 1933-34; died July 2, 1979, age 72.

Tenuate®
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

Drug Dependence: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia.

Use in Pregnancy: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdose. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdose include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdose.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.

Cayey, Puerto Rico 00633

Direct Medical Inquiries to

MERRELL-NATIONAL LABORATORIES

Division of Richardson-Merrell Inc.

Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

**Overweight may not always be simple...
complications can develop*.
Complicated or not...**

Tenuate® Dospan®^{IV} **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.
And it's responsible medicine.**

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

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DOCTOR:

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As medical practice becomes more complicated and more highly specialized, you need more highly trained medical assistants in your office.

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As the first professional organization for medical assistants (founded 1956), AAMA pioneered in developing the only certification program in this field. A medical assistant who successfully completes the basic examination is identified as a Certified Medical Assistant (CMA). Specialty categories include administrative (CMA-A), clinical (CMA-C), and pediatric (CMA-Ped). More than 7,500 certificates have been earned since the first examination was given in 1963.

The AAMA pioneered in the development of curriculum standards for medical assisting programs. The American Medical Association, in collaboration with AAMA, is recognized as an official accrediting agency for such programs by the U.S. Office of Education.

On five different occasions the AMA House of Delegates has passed resolutions commending the objectives of AAMA, endorsing its functions, and urging every physician to encourage medical assistants to join the association in order to benefit from its educational programs.



To help your medical assistants do a better job of helping you, urge them to join AAMA—the professional association dedicated to their continuing education. Fill in the attached coupon and mail it today. Your practice deserves the best.

I wish to inquire about membership for my medical assistant in the American Association of Medical Assistants, Inc. Please send more information to:

Name _____

Business Address _____ Phone _____

City _____ State _____ Zip Code _____

Member of county medical society? Yes _____ No _____

County _____

Names of assistants

Addresses

Clip and mail to: American Association of Medical Assistants, Inc., One East Wacker Drive, Chicago, Illinois 60601.

MEETINGS

National and Regional

American Medical Association Winter Scientific Meeting, January 12-15, 1980, San Antonio, TX; James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi Academy of Family Physicians, Annual Meeting, July 1980, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Mississippi State Medical Association, 111th Annual Session, May 1, 1980, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638, Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, January, April, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., B6 Medical Arts Bldg., 1151 N. State St., Jackson 39201. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson, Yazoo.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 p.m., Clarksdale. Henry McCrory, Secy., P.O. Box 340, Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, 1st Wednesday, January, March, May, September and November. H. S. Barrett, Secy., P.O. Box 1898, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. W. W. East, Secy., P.O. Box 4128 West Station, Meridian 39301. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, 1st Tuesday, February, June, September, December, Ramada Inn, Natchez. Walter T. Colbert, Secy., P.O. Box 1167, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, December. Bernard Hunt, Secy., 1196 Mound St., Grenada 38901. Counties: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. James M. Cooper, Secy., 605 Garfield St., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, March, August, December. Cherie Friedman, Secy., 424 South 5th, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Thomas Waller, Secy., P.O. Box 1487, Starkville 39759. Counties: Clay, Oktibbeha, Lowndes, Noxubee.

Singing River Medical Society, 3rd Monday, February, May, August, November. Robert D. Holbert, Secy., P.O. Box 1502, Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. Clyde Allen, Secy., 1245 N. 6th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, Secy., The Street Clinic, Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801
Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39216
Forrest General Hospital
Box 1897
Hattiesburg, MS 39401
Mississippi Baptist Hospital
1225 N. State Street
Jackson, MS 39201
Mississippi Radiological Society
316 Medical Arts Building
Jackson, MS 39201
Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531
Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120
King's Daughter Hospital
Box 948
Brookhaven, MS 39601
Delta Medical Center
Greenville, MS 38701
Riverside Hospital
Lakeland Drive
Jackson, MS 39208
Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614
Mississippi Chapter
American College of Surgeons
Box 5229
Jackson, MS 39216
Mercy Regional Medical Center
100 McAuley Drive
Vicksburg, MS 39180
St. Dominic-Jackson Memorial Hospital
Lakeland Drive
Jackson, MS 39216

MEDICAL ORGANIZATION

MBMC Establishes Stroke Service

Stroke patients, their families, doctors and other Mississippians may soon be able to find more answers to questions about stroke prevention and treatment with the help of a new stroke service established at Mississippi Baptist Medical Center.

The service, organized by neurosurgeons and neurologists throughout the state, is designed to help prevent strokes by identifying persons with high risks of having strokes. The service will also provide a central location for physicians to refer patients for evaluation of stroke treatment.

Special emphasis will be placed upon identifying high risk patients in the state who have had earlier symptoms relating to strokes, according to physicians working with the stroke service. Patients will be referred to the service to allow physicians to try to remedy the problem before a stroke occurs.

The stroke service was recently inaugurated at MBMC with the assistance of Dr. H. J. M. Barnett, chief of the Neuro-Science Division of the University of Western Ontario in London, Ontario, Canada. He is also coordinator of an international effort to study the problem of strokes and newer procedures in the treatment of strokes. Baptist Medical Center is a participant in this effort.

The most recent figures from the State Board of Health show that strokes were the third leading cause of deaths in Mississippi, as well as the United States, in 1977. Strokes afflict about 500,000 persons each year in this country with an economic cost of more than six billion dollars. This cost is the result of direct expenditures for medical and nursing care and rehabilitation; indirect expenditures result from such costs as earnings lost through disability and premature death.

In addition to performing more common procedures for the prevention and treatment of strokes, physicians working with the MBMC stroke service will be able to perform a brain/artery bypass which can prevent a stroke in some patients, and/or lead to partial recovery of lost functions resulting from a stroke.

The brain/artery bypass, similar to a cardiovascular bypass, allows blood to flow around a blocked area, thereby lessening the possibility of a stroke or improving the brain circulation in a partial stroke.

The only way such surgery can be performed is with the aid of a highly specialized microscope which was purchased by MBMC last year. The instrument is one of less than six in the nation.

Physicians desiring further information about the stroke service should call Baptist Medical Center in Jackson at 968-1000.

Canadian Physician Visits MBMC



Meeting with Dr. H. J. M. Barnett (center) of London, Ontario, Canada to inaugurate the Mississippi Baptist Medical Center stroke service are Dr. Douglas L. Stringer (left) and Dr. Charles L. Neill (right), both neurosurgeons on the MBMC medical staff. Dr. Barnett is the senior author of the world-renowned aspirin study for prevention of strokes in males and also is coordinator of an international effort which MBMC has joined to study the problem of strokes and newer procedures in the treatment of strokes.

Dr. Conerly Heads UMC Continuing Education Division

Dr. Albert Wallace Conerly, Sr., has been named director of the Division of Continuing Health Professional Education at the University of Mississippi Medical Center.

His appointment became effective July 1.

Dr. Conerly, who is also assistant professor of medicine at the Medical Center and medical director

ORGANIZATION/Continued

of respiratory therapy in the School of Health Related Professions and the University Hospital, succeeds Dr. Roland B. Robertson, UMC assistant vice chancellor for VA affairs and assistant professor of medicine. Dr. Robertson had served as acting director of the division since it was created.

As director, Dr. Conerly will assume primary responsibility for coordinating and planning all continuing education courses at the Medical Center for physicians, dentists, nurses, and allied health personnel.

This year, more than 3,000 Mississippi health professionals earned credit for participation in Medical Center offerings. The division was established in 1974 to expand the Medical Center's continuing education program and to meet the increasing demand for postgraduate education in the medical community.

A general practitioner in the Jackson area for four years, he completed a residency in internal medicine at the Medical Center and joined the faculty in 1973.

Prior to that time, he was a fellow in cardiology at the Alton Ochsner Medical Foundation and Ochsner Foundation Hospital in New Orleans and a Mississippi Lung Association fellow in respiratory diseases at the Medical Center. His professional affiliations include membership in the American Thoracic Society, the American College of Chest Physicians, and the American College of Physicians.

Dr. Conerly served a two-year term as senior examiner on the National Board of Respiratory Therapy and currently represents the American Thoracic Society on the Board of Trustees of the National Board of Respiratory Therapy. He also serves as the medical advisor to the Mississippi Society, American Association of Respiratory Therapy.

UMC Announces Faculty Promotions

Promotions of 16 School of Medicine faculty members were announced last month at the University of Mississippi Medical Center.

Medical school faculty moving up to the rank of professor are Dr. T. Walter Treadwell, family medicine; Dr. George V. Smith, surgery; and Dr. Ronald S. Drabman, psychiatry and human behavior (psychology).

Dr. Treadwell, who joined the faculty in 1969, earned the B.A. and M.D. degrees at Vanderbilt University. Dr. Smith, director of the transplantation

division and coordinator of surgical oncology, is a native Mississippian who joined the faculty in 1971. He earned the B.A. degree at the University of Mississippi and his medical degree at Harvard.

Dr. Drabman, on the faculty since 1975, is a B.S. graduate of the University of California at Los Angeles. He earned the Ph.D. degree at the State University of New York at Stony Brook.

Moving up to the rank of associate professor in the School of Medicine are Dr. George W. Briggs, family medicine; Dr. Robert Sanford, neurosurgery; Dr. George William Bates, obstetrics and gynecology; Dr. Virginia Lockard, pathology.

Also promoted to associate professor are Dr. John E. Hall and Dr. Thomas E. Lohmeier, physiology and biophysics; Dr. Jeff A. Kelly, psychiatry and human behavior (psychology); Dr. Bernard L. Blumenthal and Dr. John Y. Gibson, radiology; and Dr. Frederick Heckler, surgery (plastic).

Medical school faculty assuming the rank of assistant professor are Dr. Donald Raggio, pediatrics (psychology), and Dr. Billy Barber and Dr. Philip Kastner, physiology and biophysics.

Memorial Gift Program Is Expanded

The Memorial Gift Program conducted by the Mississippi Lung Association as part of the overall program to prevent and control lung diseases will be continued and expanded during the next fiscal year, according to Dr. John F. Busey of Jackson, president of the Christmas Seal voluntary health organization.

"We take this opportunity of expressing appreciation to those who have made memorial gifts to the association," stated Dr. Busey. "The memorial fund has been established to provide a practical and appropriate means by which families and friends can honor the memory of a departed loved one and help support the continuing effort toward the conquest of respiratory illnesses."

Dr. Busey added that the Mississippi Lung Association has expanded the memorial program to give donors an opportunity to commemorate a joyful occasion such as a birthday, recovery from an illness, an anniversary, or some other memorable time in the life of a relative or friend. All memorial gifts support service, education and research in the fight against emphysema, bronchitis, asthma, tuberculosis and other lung diseases.

Tax-deductible memorial gifts may be made to local lung association chapters or directly to the Mississippi Lung Association, P. O. Box 9865, Jackson, MS 39206.

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Colace means escape—from laxative stimulation, from laxative harshness, from laxative habit. Colace gently helps soften stools for easy, painless, unstrained elimination. It's the great laxative escape, from infancy to old age. Available in 100 and 50 mg. capsules. Syrup or liquid.

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Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg

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- 100% free theophylline

Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema.

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100. Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

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Medico-Legal Brief

Public Appointees Required To Be Members

A state may require that appointees to the public agency regulating the profession belong to a specified private organization, the U.S. Supreme Court ruled.

The Texas Optometry Act required that four of the six members of the optometry board be members of the Texas Optometric Association. A Board member who was ineligible for membership in the TOA because of noncompliance with the code of ethics required for membership challenged the constitutionality of those two provisions.

A federal trial court ruled that the membership requirement was reasonably related to a valid state purpose and was constitutional.

On appeal, the U.S. Supreme Court said that the provision governing composition of the Board was constitutional and did not violate the optometrist's equal protection rights merely because he was ineligible for four of the six seats on the Board. *Friedman v. Rogers*, 99 S.Ct. 887 (U.S. Sup.Ct., Feb. 21, 1979)

Chicago Will Host Surgery Clinical Congress

The 65th annual Clinical Congress of the American College of Surgeons, the largest convention of surgeons in the world, will be held in Chicago, Oct. 21-26, 1979. It is anticipated that over 12,000 physicians will register for the conference with total attendance, including guests and other medical professionals, exceeding 22,000.

The program will include 18 postgraduate courses and more than 50 panel discussions and symposia on general surgery and other surgical specialties. The Forum on Fundamental Surgical Problems will include presentation of 270 research-in-progress reports. More than 150 scientific exhibits and 250 technical exhibits will be on display. Convocation ceremonies awarding Fellowship in the American College of Surgeons to more than 1,200 surgeons will take place Oct. 25.

The medical education programs of the Clinical Congress meet the criteria for hour-for-hour credit in Category 1 of the Physician's Recognition Award of the American Medical Association.

Registration information may be obtained from the American College of Surgeons, 55 E. Erie St., Chicago, IL 60611.

UMC Names New Faculty Members

Six new faculty members have joined the School of Medicine faculty at the University of Mississippi Medical Center.

Dr. Norman C. Nelson, UMC vice chancellor and medical school dean, announced the July 1 appointments following approval by the Board of Trustees, State Institutions of Higher Learning.

New assistant professors are Dr. Stanley W. Chapman, medicine; Dr. Kent Alan Kirchner, medicine; and Dr. Daksha Patel, pediatrics. New instructors are Dr. Guy Douglas Campbell, medicine; Dr. Joel Craig Ledbetter, pediatrics; and Dr. John Robert Ford, family medicine.

Dr. Chapman, an instructor at the University of Rochester School of Medicine since 1977, is a former medical officer and clinical associate at the National Institutes of Health. A B.S. graduate of Colgate, Dr. Chapman earned the M.D. and held a fellowship at the University of Rochester School of Medicine. He interned and took residency training at Emory University Affiliated Hospitals.

An instructor in medicine at the University of Kentucky Medical Center since 1978, Dr. Kirchner earned the B.S. degree at Williams College and the M.D. at the University of Virginia Medical Center. He interned, took residency training and held a fellowship at the University of Kentucky Medical Center.

Dr. Patel, a fellow at the University of Cincinnati Medical Center since 1977, earned the M.S. degree at the University of Bombay. After earning the M.B.B.S. degree at India's Grant Medical College, he interned at J. J. Groups of Hospital in Bombay and Brookdale Medical Center in Brooklyn, NY, and was a resident at Markland Hospital in Newark, NJ.

Dr. Campbell earned the M.D. degree at the Medical Center, and interned and took residency training there from 1976-1979.

Dr. Ledbetter, a resident at UMC since 1976, earned the B.S. degree at Auburn University and the M.D. degree at the University of Alabama School of Medicine.

Dr. Ford, a B.S. graduate of Belhaven, earned the M.D. at the Medical Center and has been in residency training there since 1976.

Pulmonary Medical Leaders Are Recognized



The Mississippi Lung Association and the Mississippi Thoracic Society recently recognized and honored pulmonary medical leaders at the MLA annual meeting. Commended for outstanding national and local service in matters of "life and breath" of the Christmas Seal voluntary health organization were, from left, Dr. A. Wallace Conerly, Sr., director of Division of Continuing Health Professional Education at the University of Mississippi Medical Center, who is currently serving as one of three physicians in the United States appointed for a four-year term by the American Thoracic Society to the Board of Trustees of National Board of Respiratory Therapy; Dr. Joe R. Norman, director, division of pulmonary diseases at UMC, currently serving his ninth year as the Christmas Seal Professor of Respiratory Disease; and Dr. David Benjamin Moore, Jr., a Mississippi Lung Association fellow in respiratory diseases, UMC.

POSTGRADUATE CALENDAR

Oct. 8-12, 1979

PRACTICE OF ELECTROCARDIOGRAPHY
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine and the Medical Center Division of Continuing Health Professional Education. Coordinator: Thomas M. Blake, M.D., professor of medicine and chief of cardiology and of electrocardiography.

This course is designed for physicians who use electrocardiograms in their regular practice. Fee: to be announced. Credit: 40 contact hours, 4 CEU, Category 1 of the Physician's Recognition Award, AMA.

FUTURE CALENDAR

Oct. 12-13, 1979

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE

University Medical Center, Jackson

Dec. 7-9, 1979

FAMILY MEDICINE REVIEW
University Medical Center, Jackson

Jan. 7-11, 1980

PRACTICE OF ELECTROCARDIOGRAPHY
University Medical Center, Jackson

Jan. 24-26, 1980

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE

University Medical Center, Jackson

Feb. 7-9, 1980

RENAL UPDATE
Holiday Inn Medical Center, Jackson

All continuing education correspondence should be addressed to: Continuing Health Professional Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

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Brookhaven, Mississippi

Excellent opportunity for Board certified or eligible Otolaryngologist. Modern and progressive hospital, medical community and service area, all of which are committed to give full support to Otolaryngologist. Twenty-two physician medical community representing ten specialties in medicine. However, no otolaryngologist specialists practicing in primary service area of at least 50,000 population. Nearly all ENT referrals by physicians and self referrals by patients require travel of 30 to 60 miles to nearest ENT specialists. Financial and professional opportunity unlimited and family-community oriented lifestyle extremely attractive. Please contact:

Richard Fuller, M.D. Chief of Staff King's Daughters Hospital Internal Medicine Clinic Brookhaven, MS 39601 Telephone 601-833-3822	OR	T. R. Montgomery Administrator King's Daughters Hospital Brookhaven, MS 39601 Telephone 601-833-6011, Ext. 402
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GYNECOLOGIST WANTED — for position with a women's medical facility located near New Orleans, LA. Our clinic offers first trimester pregnancy terminations as well as routine gyn care. Special training is available. Remuneration — excellent. A physician wishing to establish his/her practice would find the clinic most satisfying. Please write: Medical Director, Metairie Women's Medical Center, 3008 19th St., Metairie, LA 70002.

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Renew life... through research into emphysema
and other lung diseases. Send your tax-deductible
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MISSISSIPPI LUNG ASSOCIATION
P. O. Box 9865
Jackson, Ms. 39206

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IN CONCLUSION

Mississippi ranks third among the 50 states in monthly consumption of gasoline per vehicle, according to a study by the Department of Energy. That is 17% higher than the national average. The estimate that vehicles in the state use 74.9 gallons of gasoline per month was based in part on calculations that give increased weight to certain types of vehicles, such as trucks, that use more fuel than passenger autos. Neighboring Alabama was one of four "average" states in gasoline consumption.

The water supply in Jackson, MS did not fare well in a comparison study by the Environmental Protection Agency on cancer-agent levels of urban water supplies. Jackson's water had a level of 240, much higher than the 100-parts-per-billion standard. Greenville, MS, however, had a level of only 2.4 parts per billion. Highest in potential carcinogens was the water in Brownsville, TX, which had a level of 450; lowest was Fresno, CA, with a level of .37.

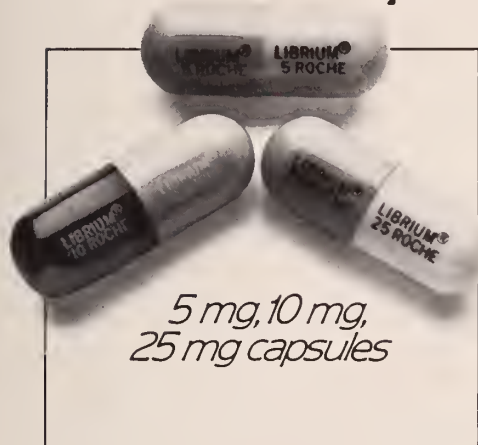
Schools in the U.S. now employ an estimated 30,000 school health nurses and almost one of every six pediatricians in the country has accepted some form of responsibility for school health services. The total expenditure by the nation's 89,000 schools on health activities is \$1 billion annually, according to the findings of a Robert Wood Johnson Foundation study on how schools are helping to meet the health needs of 43.7 million children.

The American Academy of Pediatrics warns that a summer epidemic of skateboard injuries is likely. In the past four years, at least 25 deaths have occurred as a result of head injuries or collisions with motor vehicles while skateboarding, and in a recent 12-month period, approximately 106,000 victims sought hospital emergency room treatment for skateboard-related injuries. Most injuries of this type occur in the 10-14 year age group.

HEW announced that contracts in the amount of \$147,593 have been awarded by the Division of Lung Diseases of the National Heart, Lung and Blood Institute to two institutions which will attempt to develop an index that will be used to estimate the potential risk of developing chronic obstructive lung disease (COLD) on the basis of an individual's personal characteristics and exposure to environmental factors, primarily smoking.

Librium®

chlordiazepoxide HCl/Roche



5 mg, 10 mg,
25 mg capsules

- ☐ Proven antianxiety performance
- ☐ An unsurpassed safety record
- ☐ Predictable patient response
- ☐ Minimal effect on mental acuity at recommended doses
- ☐ Minimal interference with many primary medications, such as antacids, anticholinergics, diuretics, cardiac glycosides and antihypertensive agents

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and

acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. Oral—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

*synonymous
with relief of anxiety*



Roche Products Inc.
Manati, Puerto Rico 00701

Please see following page.

Librium®

chlordiazepoxide HCl/Roche
5 mg, 10 mg, 25 mg capsules

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NEW YORK N.Y.

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with relief of anxiety*

Please see preceding page for a summary of product information.

September 1979

BALCONY

Journal of the
State Medical
Association

Mississippi

(ISSN 0026-6396)

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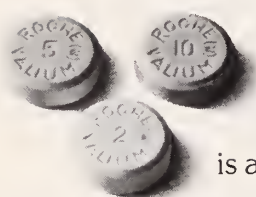
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A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium®^{IV} diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic
tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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An Open Letter To Physicians

Many physicians are seeking relief from the ever increasing pressures of private practice. If you are a physician, and less than 56 years of age, the United States Air Force Medical Service offers you an alternative and a unique challenge.

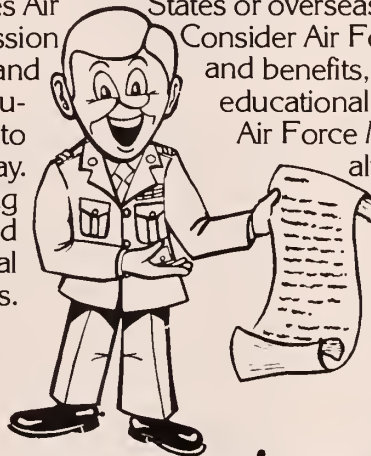
The Air Force physician participates in a group practice environment with the entire spectrum of medical specialties available. All United States Air Force Hospitals comply with joint Commission on Accreditation of Hospitals standards and are equipped with the finest medical instrumentation available. Health care is provided to every patient without regard for his ability to pay.

Benefits provide a secure and satisfying lifestyle, including 30 days of annual paid vacation, professional pay and recreational opportunities.

Consider the Air Force as an alternative to your present practice. Positions are available in primary health care delivery, and a few major medical specialties.

Starting salaries and rank are commensurate with education and experience. Assignment to a specific Air Force Hospital within the United States or overseas may be arranged.

Consider Air Force Medicine. Excellent pay and benefits, professional challenge and educational opportunities make the Air Force Medical Service a viable alternative to private practice.



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3991007



A reminder

ZYLOPRIM[®]

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim[®] (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease. Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol[®] (mercaptopurine) or Imuran[®] (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age: Zyloprim[®] (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular: There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim[®] (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic: There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVERDOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIED: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)



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Volume XX

Number 9

September 1979



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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Former Stater Is Named To Arthritis Foundation Post

Frederic C. McDuffie, M.D., a past president of the Mississippi Chapter of the Arthritis Foundation, has been named to a post in the national organization. He will join the Arthritis Foundation as senior vice president for medical affairs, a new position which combines the duties of medical director with responsibility for all the foundation's medical and governmental activities.

Dr. McDuffie was formerly associate professor of internal medicine and associate professor of microbiology at the University of Mississippi School of Medicine. He was consultant in medicine and microbiology for the Mayo Clinic and Mayo Foundation, and was an associate professor at the Mayo Graduate School of Medicine. He is a member of the American Rheumatism Association; American Association of Immunologists; Society of Experimental Biology and Medicine; Central Society for Clinical Research; American Federation of Clinical Research; Joint Club; and the American College of Physicians.

Currently the editor of the *Journal of Laboratory and Clinical Medicine*, Dr. McDuffie also serves on the editorial board of the *Journal of Rheumatology*.



Dr. McDuffie

Chest Physicians Will Meet in Houston

The 45th annual Scientific Assembly of the American College of Chest Physicians will be held at the Hyatt Regency Hotel and the Albert Thomas Convention Hall in Houston, TX, Nov. 4-8, 1979.

The five-day educational program will feature a variety of topics related to the diagnosis and treatment of cardiovascular and pulmonary diseases, including cardiac pacing, occupational lung disease, hypertension and smoking clinics.

The meet is certified for up to 30 credit hours for Category 1 of the Physician's Recognition Award of the American Medical Association. For more information write to: Dale E. Braddy, Director of Education, American College of Chest Physicians, 911 Busse Highway, Park Ridge, IL 60068.

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Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect, rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle, the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychological dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSEAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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Direct Medical Inquiries to

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References: 1. Citations available on request from Medical Research Department, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, J., R.H., and Leyland, H.M. A comprehensive review of diethylpropion hydrochloride. In: *Central Mechanisms of Anorectic Drugs*, S. Garattini and R. Samanin, Ed. New York: Raven Press, 1978, pp. 391-404.

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In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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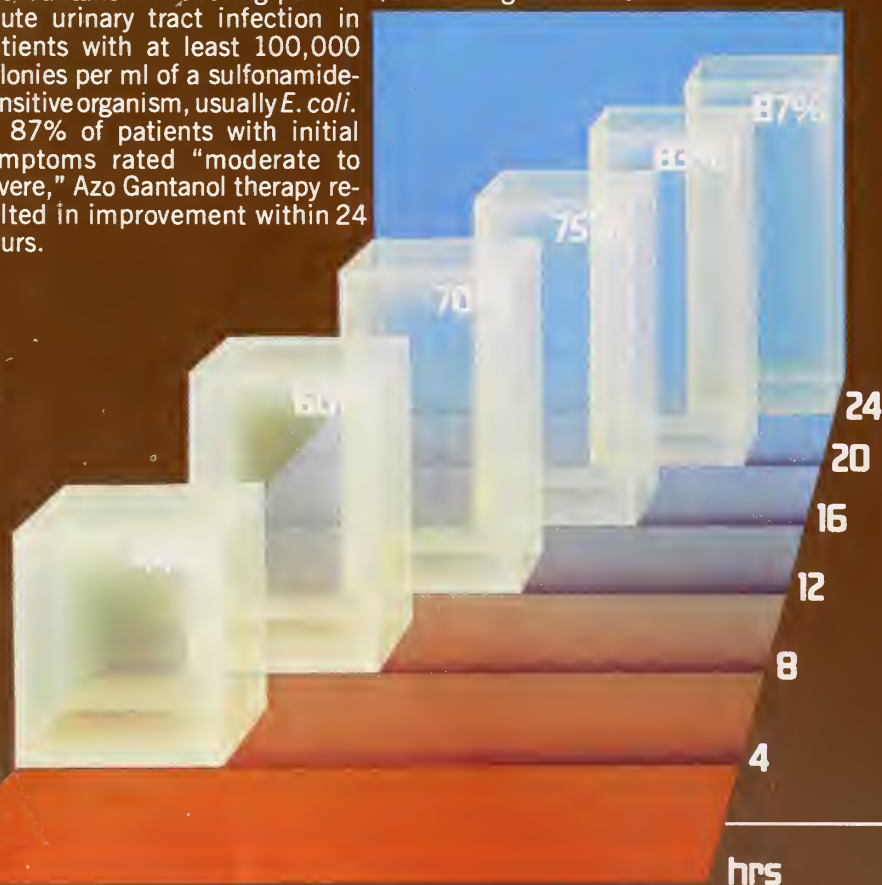


For prescribing information see opposite page

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for
the pain

for
the pathogens

Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows:
Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.



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New Orleans Hosts International Scientific Assembly

The 64th annual International Scientific Assembly of Interstate Postgraduate Medical Association will be held at the New Orleans Marriott, New Orleans, LA, Nov. 5-8, 1979. The Assembly is designed for primary care physicians practicing in the United States and Canada. The program has been planned cooperatively with the Louisiana Academy of Family Physicians, Tulane University, and Louisiana State University.

It is acceptable for 24 prescribed hours and 4 elective hours of credit by the American Academy of Family Physicians and the College of Family Physicians of Canada. It is also acceptable for a like number of credit hours toward the AMA Physician's Recognition Award.

The program consists of lectures, informal group discussions, live television, and medical movies on a variety of topics. Major emphasis of this year's program is on infectious diseases, chronic pain, nutrition, gastroenterology, endocrinology, and cardiology.

The Assembly is open to any physician in the United States and Canada. The advance registration fee is \$90 (\$100 at the meeting). The fee for resident physicians and ancillary health professionals is \$35. For program and registration materials, write to Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P. O. Box 1109, Madison, WI 53701.

Family Physicians Plan CME Conclave in Atlanta

The 31st annual Scientific Assembly of the American Academy of Family Physicians (AAFP) will be staged Oct. 8-11 at Atlanta's Georgia World Congress Center.

This year's theme, "A Special Decade, 1969-1979," notes the ten years family practice has been a recognized medical specialty. Members participating in the October conclave can accrue up to 30 hours of CME credit. Among the topics offered are: prevention of sports injuries, practice diagnosis of the cardiac patient, headaches, arthritis, allergy testing and treatment, behavior modification, nuclear medicine, diabetes, asthma, depression, fractures and infectious diseases.

More information is available from AAFP's Communications Division, 170 West 92nd St., Kansas City, MO 64114.

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For additional information contact: John R. Reedy,
Executive Director.

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NEWSLETTER

September 1979

Dear Doctor:

The House of Delegates of the American Medical Association voted to withdraw immediately from the Liaison Committee on Continuing Medical Education (LCCME) during AMA's Annual Meeting in Chicago. The decision followed two days of debate and overruled a reference committee recommendation that the action be delayed. Supporters of the move said that conflicts during LCCME meetings had made it difficult for the various members to work together for advances in CME.

Delegates asked the Board of Trustees to study a proposal to give medical school part-time and voluntary clinical faculty members category one credit for teaching students and resident physicians, and told the Board to control spending on CME programs. They also cautioned state agencies to consider costs before accrediting CME programs.

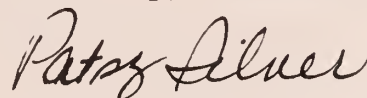
The AMA's position on chiropractic doctrine and the relation between physicians and chiropractors was re-defined in a Board of Trustees report adopted by the House. The new statement reaffirms the traditional medical viewpoint that chiropractic theory is unsupported by scientific evidence, but permits physicians to refer a patient to a "licensed limited practitioner" if he believes it will be beneficial to the patient.

Other actions included a reaffirmation of the American Medical Association's policy on national health insurance; reaffirmation of AMA's commitment to voluntary restraint of physician fee increases; adoption of a progress report on the revision of the Principles of Medical Ethics; and agreement to coordinate activities of American physicians volunteering to help refugee "boat people."

The House adopted a program for a \$45,000 expanded AMA campaign against cigarette smoking. Educational materials for physicians, anti-smoking programs for medical societies and "stop smoking" kits for consumers will be developed. Resolutions urging TV networks to halt the use of athletes to endorse tobacco products and commending publications refusing to accept cigarette ads were adopted.

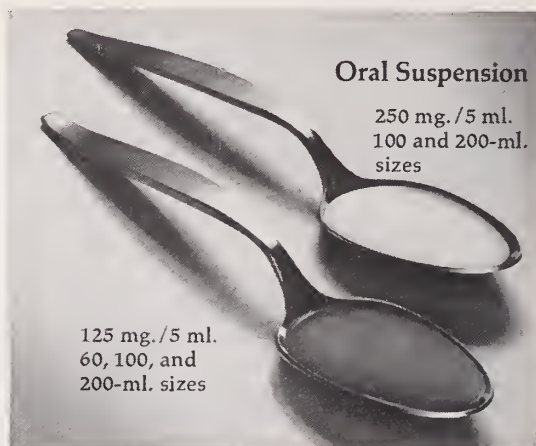
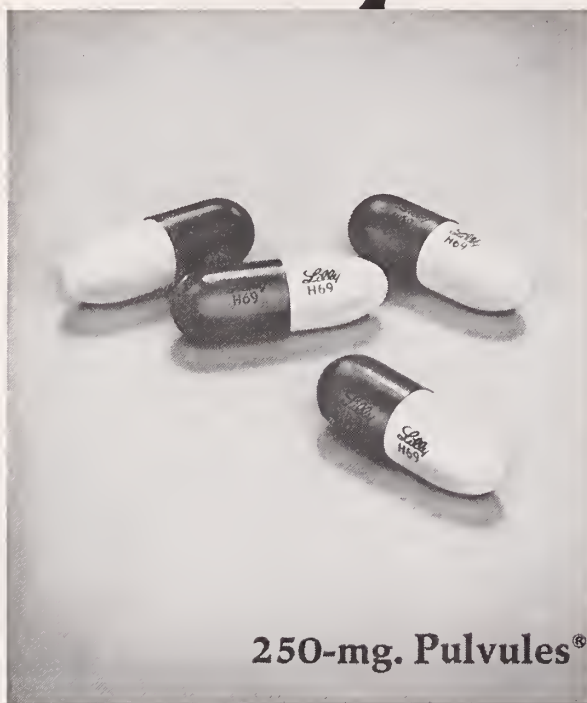
In his inaugural address, AMA President Hoyt Gardner, M.D., urged physicians to recognize and promote voluntary cost containment as an important new dimension of medical ethics and appealed to physicians to make a renewed commitment to basic ethical principles. "Technology and technique must never be allowed to overwhelm a reverence for what is human in man. And that reverence is where ethics begin," he said.

Sincerely,



Patsy Silver
Managing Editor

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High Blood Pressure Conference Is Scheduled

A national conference on the "Current State of the Art in High Blood Pressure Control Applied to Rural Communities" will be held Oct. 25-27, at the Landmark Resort Hotel in Myrtle Beach, SC. Recent behavioral, epidemiological and clinical high blood pressure research findings will be presented. Recommendations will be formulated for improving high blood pressure control in rural communities.

Continuing education credits for 14 contact hours are offered for Category 1 of the Physician's Recognition Award of the American Medical Association from the American Academy of Family Physicians. For nurses, accreditation will be awarded by the Medical University of South Carolina Division of Continuing Education.

For more information, contact Mrs. Georgia L. Wingard, Department of Health and Environmental Control, Division of Chronic Disease Control, 2600 Bull St., Columbia, SC 29201.

Leukemia Grants Top \$2 Million

Research grants from the Leukemia Society of America, Inc. will total more than \$2 million in the next year.

Sixty-two medical scientists have been awarded grants by the society since January, including 15 Scholars who will receive \$100,000 over a five-year study period, 20 Special Fellows and 27 Fellows whose awards are \$31,000 and \$25,000 respectively for two-year study periods. The society now supports the research of 133 scientists at 60 institutions in the United States and abroad.

Grantees are working in the fields of immunology, virology, chemotherapy and the basic sciences as they are related to leukemia and allied diseases of the blood-forming organs. "Significant progress has been made, but the disease still strikes some 22,000 Americans every year — and it kills more than 15,000 of them," stated a spokesman.

In addition to serving as a major source of leukemia research funds, the society sponsors a financial aid program for needy patients as well as professional and public education programs. This three-pronged attack on leukemia is carried out by the society's 51 chapters in major cities throughout the country.

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DATELINE

FDA Estimates Insert Costs

Washington, DC - Economists for the FDA estimate that the agency's proposed system for providing patient package inserts will cost about \$90 million per year, 97% of which will be borne initially by industry and pharmacy. It will eventually mean an increase to consumers of 6.3 cents per prescription. Industry's share of the costs is an estimated \$12.78 million; retail pharmacies, \$75 million; FDA, \$900,000. Only slightly affected will be distributors and hospital pharmacies.

EMS Grant Is Approved

Jackson, MS - The Emergency Medical Services Division of the State Board of Health has received notice that a grant proposal has been approved by the Dept. of HEW. An amount of \$473,000 will be utilized by two state areas, the North and Southwest Regions, for expansion of EMS services to include advanced life support. The remainder of the funds, \$117,000, will be used by the EMS Division for coordination of regional activities and development of the State Poison Control Center's second phase.

Lung Research Grants Available

Jackson, MS - Mississippi research investigators whose interests center on the respiratory system and any problem of lung disease may apply now to the Mississippi Lung Association for financial grants to support their research. Awards will be made on competitive merit basis for unique and non-duplicative research or medical education projects. Deadline is Dec. 1, 1979. For more information, contact the Mississippi Lung Association, P.O. Box 9865, Jackson, MS 39206; telephone 362-5453.

CON Wait Costs

Houston, TX - The year-long wait for certificate of need approval has resulted in a \$1.2 million increase in the cost of a hospital's expansion project, says the "Harris County Physician Newsletter." The increase will mean that Diagnostic Center Hospital will pay \$900,000 in additional interest. The expansion project includes a new emergency department, a new garage, new lobby, relocated administrative offices, an expanded cafeteria and remodeling of ancillary departments.

Malpractice Claims And Rates Are Up

Jackson, MS - After two years of decline in the number of new malpractice claims, the trend has shifted upward again, causing St. Paul Insurance Co. to file for rate increases which are expected to vary from 37% to 55%. In 1978 claims were up 12% over 1977, with the average value per claim up 18%. Mississippi Medical Fraternal and Educational Society, now numbering more than 1,100 insured, also expects to increase rates, but the rates will remain below St. Paul's.

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symptom...**



...in the functional bowel/irritable bowel syndrome*

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(dicyclomine hydrochloride USP)

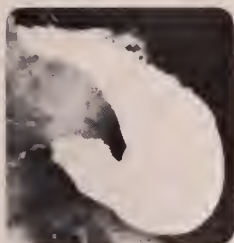
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964

Merrell

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(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis, myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdose, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste, headache, nervousness, drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation, constipation, bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations, some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage. Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg. *Adults:* 1 tablet three or four times daily. Bentyl Injection *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Public Relations Specialist Addresses AMA Workshop

The current mood of the American people, characterized by feelings of alienation, cynicism and loss of confidence in our existing institutions, is likely to have a profound effect on organized medicine during the coming year, according to Stuart Spencer, president of Spencer Roberts and Associates. He made these remarks at a public relations and communications workshop held in conjunction with the annual meeting of the House of Delegates of the American Medical Association, which took place July 22-26 in Chicago.

Spencer reminded conference participants that although the American mood is usually manifested in voter apathy, there is a growing concern with what he terms "pocketbook" issues: taxes and inflation. He cited the success of California's Proposition 13 as evidence that the American people, when motivated to exercise their voting power, will do so to achieve their goals.

Spencer remarked that his organization's surveys show that support for national health insurance is growing. He outlined the three health care priorities of the American people: protection from rising costs, improvements in the system to give the poor and disadvantaged better access to good medical care; and the right of an individual to choose his own doctor or hospital.

The public relations specialist reiterated that the American people are looking for a leader, and they continue to express confidence in physicians and the American Medical Association as the best possible leaders to solve the problems in the health care system.

In the joint effort between the American people and organized medicine to meet the demands of a changing society, public relations spokesmen for county, state and national medical societies have a challenging role. But individual physicians have the greatest influence on public opinion on a day-to-day basis, Spencer said. His advice to them is "be a good communicator."

The workshop, sponsored by the public relations department of the AMA, also featured remarks by John Krichbaum, assistant director of AMA's legislative department. He outlined projected activities on the state level.

Conference participants included executive directors, journal editors and public relations directors of state medical societies.

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Rectal Cream with Hydrocortisone Acetate

CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg, bismuth subgallate, 2.25%, bismuth resorcin compound, 1.75%, benzyl benzoate, 1.2%, Peruvian balsam, 1.8%, zinc oxide, 11.0%, also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg, bismuth subgallate, 22.5 mg, bismuth resorcin compound, 17.5 mg, benzyl benzoate, 12.0 mg, Peruvian balsam, 18.0 mg, zinc oxide, 110.0 mg, also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani. Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol[®] Suppositories or Ointment.

Contraindications: Anusol-HC[®] Suppositories and Anusol-HC[®] Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Caution should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults. Remove foil wrapper and insert suppository into the anus. One suppository in the morning

and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults. After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24), in silver foil strips with Anusol-HC W C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01), with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F).

Full information is available on request.



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ORIGINAL PAPERS

Bone Disease of Chronic Renal Failure

JAIRO BARONA-Q., M.D., A. RANDLE WHITE, JR., M.D., and JOHN D. BOWER, M.D.

Jackson, Mississippi

BONE DISEASE of chronic renal failure constitutes one of the most devastating complications in patients with end stage renal disease on or off dialysis. To a large extent it is preventable if the proper therapeutic approach is taken.

Under normal circumstances bone integrity is maintained by the complex interplay of many different factors, including hormones (parathormone and thyrocalcitonin), divalent cations (calcium and magnesium), and vitamin D (see Figure 1). Vitamin D and parathormone promote calcium and phosphorus reabsorption from the bone and enhance absorption from the gastrointestinal tract. Parathormone also enhances calcium reabsorption by the kidney. Under conditions of increased levels of parathormone as seen in primary and secondary hyperparathyroidism, dangerously high levels of both calcium and phosphorus would develop, resulting in extensive metastatic calcification were it not for the fact that at the kidney level, parathormone enhances excretion of phosphorus by decreasing phosphate reabsorption.

Ionized calcium, which normally represents approximately 48% of the total plasma calcium, controls the release of parathormone in such a way that when plasma levels of ionized calcium fall, parathormone secretion is stimulated, and when plasma ionized calcium is elevated, parathormone secretion is suppressed. This is a very sensitive mechanism and accounts for the maintenance of plasma ionized calcium levels within very narrow limits.

From the Department of Medicine, University Medical Center, Jackson, MS.

The bones contain 99% of total body calcium laid down in combination with phosphorus as hydroxyapatite in a crystalline form, and represent a ready source of calcium under conditions of extracellular deficit. Calcium is normally lost in the urine in amounts of approximately 125 mg per day.

Calcium and phosphorus metabolism becomes abnormal in renal failure, causing bony demineralization and metastatic calcification. The authors discuss this condition and suggest preventive measures.

These losses are compensated by calcium absorbed from the gastrointestinal tract under the influence of vitamin D and parathormone. Under conditions of calcium malabsorption, i.e., vitamin D deficiency, the resulting lower plasma levels of ionized calcium will stimulate parathormone secretion, which in turn will promote bone resorption to bring the plasma calcium levels back to normal. This will also mean that less calcium will be available in bone for the normal process of bone mineralization resulting in the pathological picture of osteomalacia. Lower plasma levels of calcium can also be the result of elevations of the plasma levels of phosphorus as renal excretory function is impaired. Homeostasis is again achieved under these circumstances by the stimulated higher plasma levels of parathormone that will translate itself into accelerated calcium withdrawal from bone and enhanced phosphorus excretion by the kidney. Plasma levels of both calcium and phosphorus will then return to normal, however, at the expense of a higher plasma level of parathormone

or, in other words, a state of secondary hyperparathyroidism. It is not until the renal excretory function has decreased to approximately 20% of normal that uncompensable hyperphosphatemia develops, further accentuating the degree of hyperparathyroidism in order to maintain plasma calcium levels at a normal range. At the bone level, parathormone enhances bone resorption by stimulating osteoclastic activity. In a persistent state of hyperparathyroidism, as in chronic renal failure, the destructive lesions of osteitis fibrosa cystica are eventually seen. Fibrosis results from the replacement of demineralized bone by fibrous tissue. Since this is radiolucent, radiologically it appears as cysts in the bone.

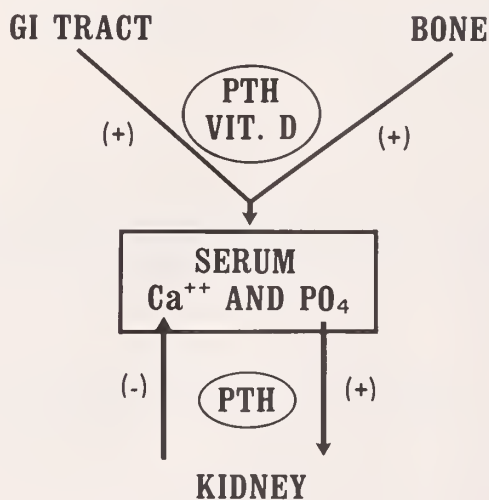


Figure 1

The normal process of bone mineralization requires that vitamin D be present. Dietary vitamin D undergoes a series of metabolic conversions resulting in the formation of several metabolites, the most potent of which is 1-25(OH)₂D₃ (see Figure 2). The known functions of this metabolite are to stimulate calcium absorption from the gastrointestinal tract and influence bone mineralization by apparently promoting normal maturation of the osteoid matrix to be calcified. Decreased production of this and related metabolites by the kidney will lead to defective bone mineralization with the accumulation of non-mineralized osteoid. This is called osteomalacia. This could be due to either a dietary deficiency of vitamin D or decreased renal production of the active metabolite. It is believed that renal disease of any sort that results in loss of nephrons will in time lead to deficient production of these active metabolites. This, plus the inhibitory effect of some as yet unidentified uremic substance on the action of

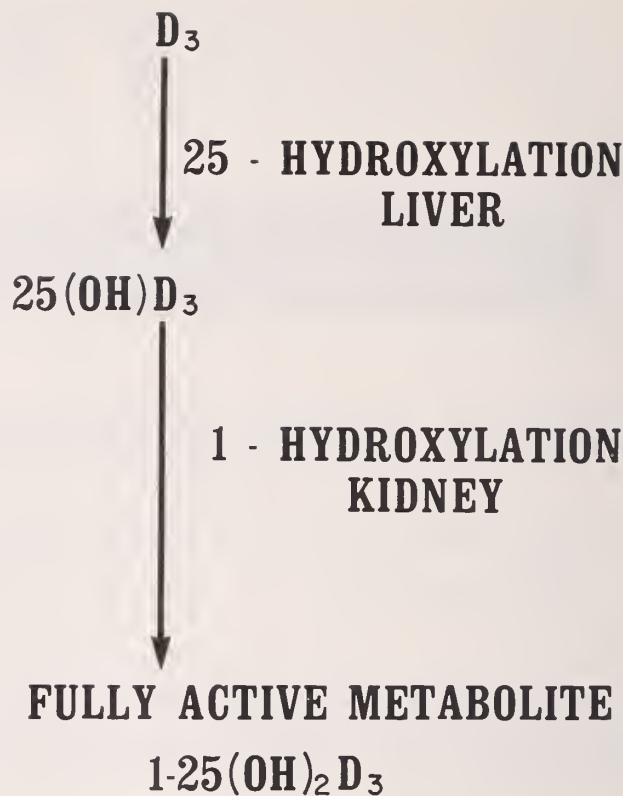


Figure 2

vitamin D on bone, will result in osteomalacia. Persistent hyperphosphatemia can also lead to metastatic calcification. This occurs when the calcium multiplied times the phosphorus product reaches 70. A summary of the possible mechanisms of bone disease in renal failure is illustrated in Figure 3.

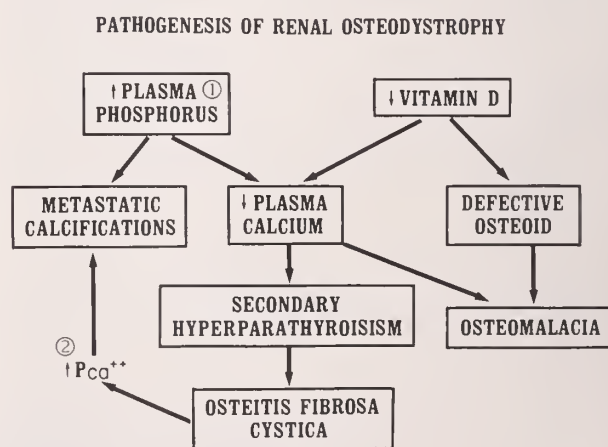


Figure 3

1. Due to renal insufficiency. Also iatrogenic: high phosphate ingestion.
2. Rarely seen with severe degrees of hyperparathyroidism. Also iatrogenic: vitamin D intoxication.

The clinical symptoms of renal osteodystrophy are shown in Table 1. Bone pain is usually vague, and more commonly involves the low back, hips, legs and knees. It may be aggravated by weight bearing.

Table I
SYMPTOMS OF RENAL OSTEODYSTROPHY

Bone Pain
Muscular Weakness
Pruritus
Bone Deformity & Growth Retardation
Periarthrititis
Spontaneous Tendon Rupture

Rarely, it is well localized and of such sudden onset as to suggest an acute arthritis. Muscular weakness is most prominent in the proximal muscles. The muscle enzymes remain normal, but the EMG may reveal mild abnormalities. There is substantial improvement in muscle strength within a few days following the administration of $1-25(\text{OH})_2\text{D}_3$. Pruritus is believed to be due to the precipitation of calcium and phosphate in the skin. This begins in hair follicles and sebaceous glands, and may progress to extensive skin calcification. Bone deformity and growth retardation is common in uremic children (renal rickets). The characteristic deformities in children are bowing of the tibia and femur, and slipped epiphyses of the distal radius, distal ulna, and proximal femur. Occasionally, an acute calcific periarthritis may occur, probably related to hyperphosphatemia and metastatic calcification. This is caused by massive deposition of hydroxyapatite crystals around a joint,



Figure 4

and must be distinguished from gout and pseudogout. With bony degeneration at the site of tendon insertion, spontaneous tendon separation may occur.

The characteristic radiographic changes of renal osteodystrophy may be seen in as many as 70% of patients with chronic renal failure by the time they reach end stage and require dialysis. The most characteristic radiographic evidence of secondary hyperparathyroidism is subperiosteal resorption of bone in the distal clavicles (see Figure 4) and the radial side of the 2nd and 3rd phalanges (see Figure 5). Resorption of the outer table of the skull produces the so-called "salt and pepper" appearance (see Figure 6). The osteitis fibrosa cystica mentioned above usually occurs in the long bones, and appears as a "punched out" lesion. The hyperplasia of



Figure 5

poorly mineralized osteoid elements may produce a "brown tumor" in the bone. Histologically, this lesion is found to consist of multinucleated giant cells in a spindle cell stroma. When the lesion is surgically removed, its appearance is found to be due to the high levels of the pigment hemosiderin.

In the spine, there is a central demineralization of the vertebral bodies. At the same time, the bone in

the upper and lower portions of the vertebral bodies becomes quite sclerotic and radiographically dense. This produces a striped appearance, and has been called "rugger jersey" sign. The radiographic changes seen in renal rickets in children are described earlier.



Figure 6

When the serum calcium times the serum phosphorus product becomes greater than 70, metastatic calcification may occur in various tissues. Fortunately, this is seen with less frequency now than in the past, due to greater attention being paid to normalizing plasma phosphorus levels with phosphate binders. Arterial calcification is seen most commonly in the aorta, where it produces a Mönckeberg's type of medial necrosis. It may also be seen in the arteries distal to the wrists and ankles. Metastatic calcification may also occur in the cornea and conjunctivae. The eyes may become markedly erythematous in this condition, producing the "red eye" syndrome of hypercalcemia. Calcific deposits in the soft tissue may become quite large in the periarticular tissue of the shoulder and hand, and may produce a painful tenosynovitis. Metastatic calcification of the viscera is most commonly seen in the lungs, kidneys (nephrocalcinosis) and heart. Cardiac calcification is quite common, but is usually undetected antemortem. Clinically, heart block, intractable congestive heart failure, and sudden death

may be seen. The role of metastatic calcification in the production of these problems is not clear.

The foundation of both the prevention and treatment of this problem is the same. The therapeutic objective is the limitation of phosphorus absorption from the gut. This is accomplished by limiting dietary phosphorus and administering phosphate binders, which prevent the absorption of phosphorus from the gut. Aluminum hydroxide and aluminum carbonate, the most effective phosphate binders, should probably be prescribed early in the course of renal failure, and definitely to keep the serum phosphorus below 5.5mg%.

When significant bony demineralization has already occurred due to the secondary hyperparathyroidism of chronic renal failure, one can promote bone healing by raising serum calcium levels. This of course should not be attempted until after serum phosphate levels are normalized, for fear of causing metastatic calcification. There are several therapeutic measures which will increase plasma calcium. First, the administration of calcium carbonate in a dose of 1-4 grams per day by mouth is effective. This is safer than other methods because hypercalcemia usually does not occur. Secondly, the administration of the vitamin D related compounds, dihydrotachysterol or the synthetic analog 1, 25 dihydroxy cholecalciferol (Calcitriol or Rocaltrol®) will be effective. These patients must be monitored *very closely*, as dangerous hypercalcemia may occur. Total parathyroidectomy is considered when severe bone pain, pruritus, and metastatic calcification are present.

Summary

Calcium and phosphorus metabolism becomes markedly abnormal in renal failure, with the devastating consequences of bony demineralization and metastatic calcification. These problems are largely preventable by careful attention to dietary phosphate intake and administration of phosphate binders early in the course of renal failure. ★★★

2500 North State Street (39216)

Acknowledgement

Mrs. Lisa Staton provided secretarial assistance.

Attitudes of Mississippi Physicians Toward Nurse Practitioners

BENJAMIN F. BANAHAHAN, III, and THOMAS R. SHARPE, Ph.D.

University, Mississippi

ONE OF THE MAJOR health care problems in rural Mississippi is the shortage of primary care providers. Among Mississippi's 82 counties, 76 were classified as medically underserved in 1976, and 57 counties were considered physician shortage areas. Attempts to reduce these numbers by recruiting physicians have had little success. Another attempt to solve this shortage problem has been to increase the use of nurse practitioners in rural areas. Efforts to recruit nurse practitioners have been particularly vigorous in Mississippi.

The major objective of the nurse practitioner role has been to increase the productivity of all levels of medical manpower by assigning functions to the least skilled and lowest paid health professional *capable* of performing the particular task. It is generally acknowledged that all of the functions currently performed by the physician do not require the high level of skills which the physician possesses.¹ Many of these functions may be effectively delegated to trained nurse practitioners, thus allowing the physician more time to perform more complicated functions requiring advanced skills.

Whether nurse practitioners have been allowed to practice in a given geographic area or professional realm has generally depended on questions concerning productivity, quality of care, and patient and physician acceptance. Most of the early research regarding nurse practitioners examined questions concerning productivity and quality of care. Results of these studies indicate that nurse practitioners can assume roles that increase physician productivity without any dilution of service quality.^{2, 3}

Several more recent studies have examined patient acceptance of nurse practitioners. These have indicated that the general population appears to be very willing to allow a trained nurse practitioner or physician assistant to care for them or their families.^{4, 5}

Patients who have actually received health services from nurse practitioners have reported very high levels of satisfaction.⁶

The question of physician receptivity to the nurse practitioner has not been extensively investigated, however. Few studies have surveyed large samples of physicians to determine their acceptance of these new health professionals. However, one study in North Carolina found that 34% of the physicians who responded to their study were willing to hire a nurse practitioner.⁷ A more recent study by Fottler et al found that 29.1% of the western New York physicians who answered their questionnaire were willing to employ a nurse practitioner in their practice. The present study reports similar findings for Mississippi physicians.

The questionnaire used for data collection was similar to the one used by Lawrence et al⁸ in North

TABLE I
COMPARISON OF POPULATION AND SAMPLE RESPONDING
BY SOCIODEMOGRAPHIC VARIABLES

Variable	Sample Number (%)	Population* Number (%)
Total	475	959
Age		
1-39	116 (25.7)	308 (32.1)
40-49	118 (26.2)	264 (27.5)
50-59	138 (30.6)	239 (24.9)
60-69	59 (13.1)	104 (10.8)
70+	20 (4.4)	44 (4.6)
No Response	24	
Sex		
Male	445 (96.1)	900 (93.8)
Female	18 (3.9)	59 (6.2)
No Response	12	
Race		
White	445 (97.8)	908 (94.7)
Non-White	10 (2.2)	51 (5.3)
No Response	20	

* Statistics for the Total Population are for all primary care active physicians reported in *Physicians in Mississippi*, Mississippi State Board of Health, July, 1975.

From the Research Institute of Pharmaceutical Sciences, University of Mississippi School of Pharmacy, University, MS.

Carolina. The questionnaires with cover letters and postage-paid reply envelopes were mailed to all primary care physicians listed in the 1978 *Mississippi Directory of Physicians*. This included 1126 physicians. After one month, follow-up letters and questionnaires were mailed to the physicians who had not responded.

Usable returns were obtained from 475 (42.2%) physicians. Demographic characteristics of the physicians who responded and the total population of primary care physicians practicing in Mississippi are presented in Table I. There are no significant differences between respondents and the entire population with respect to age, sex and race categories; therefore, the sample which responded to our survey appears to be representative of the total population.

The general attitudes of the physicians about the nurse practitioner concept are reported in Table II.

TABLE II
PHYSICIANS' ATTITUDES TOWARD NURSE PRACTITIONERS

Category	Number (%)
Would like to employ	105 (23.6)
Would not like to employ, but approve of the concept	152 (34.2)
Would not like to employ, and disapprove of the concept	131 (29.4)
Do not know enough about the concept to decide	57 (12.8)
No Response	30

Of the physicians responding, 105 (23.6%) indicated a desire to employ a nurse practitioner. An additional 152 (34.2%) approved of the concept but did not presently want to employ one. Of particular interest is the fact that 57 (12.8%) physicians indicated that they did not know enough about nurse practitioners to decide whether they approved of the concept. This may indicate a need to provide additional information concerning nurse practitioners to primary care practitioners in the state.

Physicians were asked to assume that they were to employ a nurse practitioner in their practice and to indicate which of 35 clinical tasks they would delegate to the nurse practitioner. These 35 items were randomly presented in the questionnaire so as to preclude order bias based on task difficulty. Table III presents the 35 items from the task delegation scale, rank-ordered according to the proportion of physicians who were willing to delegate each task in their own practice setting.

These data indicate the hierarchy of tasks physicians are willing to delegate to nurse practitioners. Many of the tasks which would be delegated by most

physicians would appear to be those which are already delegated to office nurses. No tasks received agreement from all of the physicians responding. The proportion of physicians who were willing to delegate a given task ranged from a high of 96.1% for taking vital signs to a low of 2.2% for setting a fracture.

Many of the physicians who did not approve of the nurse practitioner concept declined to answer the remainder of the questionnaire. These remaining items dealt with the training, utilization and reimbursement of nurse practitioners. Therefore, responses from only those physicians who expressed approval of the nurse practitioner concept were analyzed. This selective analysis was done in order to more accurately portray the attitudes of the physicians who may possibly hire or work with nurse practitioners.

The majority (65.9%) of these physicians preferred that the nurse practitioner be trained using a combination of formal training followed by additional months of on-the-job training in the physician's office (see Table IV). This is presently the manner in which most nurse practitioners are trained. The second most preferred mode of training was to hire a fully trained nurse practitioner (22.5%). Thus it appears that many physicians do not desire to be involved in a formal training situation. This reluctance is also reflected by the low percentage (7.6%) of physicians who prefer on-the-job training of an office nurse to perform this role.

TABLE IV
MODE OF TRAINING PREFERRED BY PHYSICIANS
APPROVING OF NURSE PRACTITIONER CONCEPT

Category	Number (%)
Training of an office nurse by physician on the job	19 (7.6)
Combination of part formal training followed by additional months of on-the-job training in physician's office	164 (65.9)
Send an office nurse for all of training	8 (3.2)
Employ a fully trained nurse practitioner	56 (22.5)
Other mode of training	2 (0.8)
No Response	8

Physicians were asked which duties they considered appropriate, and *most* appropriate, for nurse practitioners to perform. Table V shows the responses to these two questions among physicians who approve of the concept.

Sharing a portion of the patient load in a physician's office was considered appropriate by the greatest number of physicians. This duty was also considered the *most* appropriate by the greatest

TABLE III
PHYSICIANS' WILLINGNESS TO DELEGATE TASKS TO NURSE PRACTITIONERS

Task Description	Would Delegate		
	YES NUMBER (%)	NO NUMBER (%)	NO RESPONSE
Take vital signs in patients' home	418 (96.1)	17 (3.9)	40
Collect clean catch urine	415 (95.2)	21 (4.8)	39
Give injections on physician's orders	414 (95.0)	22 (5.0)	39
Record the results of laboratory studies	409 (94.5)	24 (5.5)	42
Draw blood on physician's orders	407 (93.6)	28 (6.4)	40
Take and record social history	412 (93.4)	29 (6.6)	34
Collect venous blood samples	406 (92.5)	33 (7.5)	36
Remove suture	398 (90.9)	40 (9.1)	37
Conduct a review of systems	370 (85.3)	64 (14.7)	41
Counsel patients on family planning	359 (85.3)	62 (14.7)	54
Prescribe diabetic diets	332 (77.4)	97 (22.6)	46
Percuss bladder for distension	328 (77.2)	97 (22.8)	50
Manage patients with chronic disorders according to standing orders	306 (72.3)	117 (27.7)	52
Provide routine prenatal care	272 (68.3)	126 (31.7)	77
Change Foley catheters in male patients	278 (67.3)	135 (32.7)	62
Examine ears with otoscope	286 (66.7)	143 (33.3)	46
Tape ankle, wrist or knee for immobilization	269 (63.9)	152 (36.1)	54
Perform joint inspection	260 (62.1)	159 (37.9)	56
Palpate uterus for fetal position	240 (60.0)	160 (40.0)	75
Counsel patients with minor psycho-neuroses	245 (58.8)	172 (41.2)	58
Dilate pupils	205 (50.2)	203 (49.8)	67
Perform physical examination with physician confirming heart and lung findings	193 (45.3)	233 (54.7)	49
Regulate medication dosage for diabetic	171 (40.9)	247 (59.1)	57
Adjust medication for patient with benign essential hypertension	164 (39.5)	251 (60.5)	60
Distinguish between normal & abnormal EKG's	121 (29.5)	289 (70.5)	65
Make delivery following uncomplicated pregnancy	108 (28.3)	274 (71.7)	93
Diagnose and treat acute otitis media	118 (28.2)	301 (71.8)	56
Perform general physical examination in absence of physician	101 (24.1)	318 (75.9)	56
Incise and drain abscess	95 (22.6)	325 (77.4)	55
Initiate drug therapy	55 (13.2)	362 (86.8)	58
Manage abdominal pain for distention	35 (8.5)	376 (91.5)	64
Aspirate joint fluid from knees	29 (7.0)	387 (93.0)	59
Perform proctoscopy	18 (4.3)	402 (95.7)	55
Perform sigmoidoscopy	12 (2.9)	407 (97.1)	56
Set fracture	9 (2.2)	403 (97.8)	63

TABLE V
NURSE PRACTITIONER DUTIES CONSIDERED APPROPRIATE BY PHYSICIANS APPROVING OF NURSE PRACTITIONER CONCEPT

Duty	Appropriate		Most Appropriate
	YES NUMBER (%)	NO NUMBER (%)	NUMBER (%)
Work in physician's office and share a portion of the patient load	217 (88.9)	27 (11.1)	138 (71.5)
Handle unscheduled patients in physician's office	126 (58.9)	88 (41.1)	7 (3.6)
Work in satellite office setting, referring complicated patients to physician's office	100 (46.9)	113 (53.1)	13 (6.7)
Work in satellite office setting, visited one or more times per week by physician	84 (41.8)	117 (58.2)	6 (3.1)
Other mode of work	33 (53.2)	29 (46.8)	11 (5.7)
None			6 (9.3)

number of the physicians (138, 71.5%). These rankings are understandable in that a nurse practitioner sharing the patient load in a physician's of-

fice is under more direct supervision of the physician, and is only a limited expansion of the nursing role of the typical office nurse.

A rapidly growing trend in many rural areas is to satisfy the health care needs of small communities by using nurse practitioner satellite clinics with physician back-up in larger communities. Almost half of the physicians (46.9%) thought that a satellite nurse practitioner clinic which refers complicated patient cases to the physician was an appropriate duty for nurse practitioners. However, only 13 (6.7%) physicians considered this to be the most preferred duty. More than 41% of the physicians indicated that a satellite clinic visited once or twice a week by the physician is appropriate.

Another major issue in the utilization of nurse practitioners that is of concern to both the physician and the nurse practitioner is the method and amount of payment the nurse practitioner receives. By far, the most preferred method of reimbursement was a straight salary (see Table VI). This alternative was selected by 179 (74.9%) of the physicians who approved of the nurse practitioner concept. Thirty-five (14.6%) preferred a salary plus a fixed percentage of the practice income.

Non-salary reimbursement methods were preferred less often. Fee for service was preferred by 11 (4.6%) of the physicians. Only 5 (2.1%) and 4 (1.7%) of the physicians preferred a fixed percentage of the practice income or a limited partnership agreement, respectively.

The physicians who approved of nurse practitioners reported annual salaries ranging from \$7,200 to \$25,000 to be reasonable (see Table VI). Both the

TABLE VI
CHOICE OF REIMBURSEMENT METHOD AND ANNUAL
SALARY BY PHYSICIANS APPROVING OF NURSE
PRACTITIONER CONCEPT

Category	Number (%)
Reimbursement Method	
Straight Salary	179 (74.9)
Salary plus fixed percentage of practice income	35 (14.6)
Fee for service	11 (4.6)
Fixed percentage of practice income	5 (2.1)
Limited partnership agreement	4 (1.7)
Other	5 (2.1)
No Response	18
Annual Salary	
\$1-\$9,999	16 (8.0)
\$10,000-\$14,999	79 (39.3)
\$15,000-\$19,999	86 (42.8)
\$20,000++	20 (10.0)
No Response	56
Minimum = \$7,200	
Maximum = \$25,000	
Mean = \$14,705	
Median = \$14,983	

TABLE VII
RELATIONSHIP BETWEEN SELECTED VARIABLES AND
PHYSICIANS' APPROVAL OF THE NURSE PRACTITIONER
CONCEPT

Variable	Approval		
	APPROVE NUMBER (%)	DISAPPROVE NUMBER (%)	
Type of practice			
Solo	90 (58.8)	63 (41.2)	$\chi^2 = 12.05$ $p < .01$
Single-specialty Group	88 (67.2)	43 (32.8)	
Multi-specialty Group	46 (74.2)	16 (25.8)	
Medical School or Institution		21 (91.3)	2 (8.7)
Previous experience with NP			
Never	122 (62.9)	72 (37.1)	$\chi^2 = 15.43$ $p < .01$
Once	22 (75.9)	7 (24.1)	
Several times	42 (64.6)	23 (35.4)	
Great deal	68 (86.1)	11 (13.9)	
Personally know MD			
Employing NP			
Yes	98 (79.0)	26 (21.0)	$\chi^2 = 9.64$ $p < .01$
No	155 (62.5)	93 (37.5)	

mean and the median were approximately \$15,000. This is in line with the current salary levels of nurse practitioners in rural health clinics in Mississippi.

Several variables were significantly related to whether physicians approved or disapproved of the nurse practitioner concept. The relationships between three of these variables and physician's approval of nurse practitioners are reported in Table VII. The physician's type of practice was highly related to his/her approval of nurse practitioners. Approval ranged from 58.8% for physicians in solo practice to 91.3% for those in medical schools or other institutions. The lower level of acceptance by physicians in solo practice was expected, based on previous studies which found that solo practitioners were more conservative than group practitioners with respect to adopting new modes of practice. Also, physicians in multi-specialty groups and institutions are more experienced with the team care approach and therefore may be more likely to accept the nurse practitioner as a member of the treatment team.

Previous experience and knowledge were also found to be important determinants of the physician's approval of nurse practitioners. Physicians who reported a "great deal" of previous experience responded with an approval rate of 86.1%; ninety-eight (79.0%) of the physicians who reported personal knowledge of another physician employing a nurse practitioner approved of the concept.

In conclusion, primary care physicians in Mississippi appear to be fairly receptive to the use of nurse

practitioners. Almost one-fourth (23.6%) of the physicians responding to the survey indicated they would like to employ a nurse practitioner. An additional 34.2% did not care to employ a nurse practitioner but approved of the concept. In all, over half of the responding physicians approved of the nurse practitioner concept.

The physicians who approved of nurse practitioners tended to prefer methods of training, utilization and reimbursement that were similar to the current trends. Most preferred a combination of formal and on-the-job training followed by the nurse practitioner assuming duties within the office practice. Although few physicians *preferred* the use of satellite nurse practitioner clinics, almost half of the respondents felt they were appropriate.

The salary ranges judged to be reasonable were in line with those currently being paid by rural health clinics in Mississippi. Over half of the physicians felt that annual salaries above \$15,000 were reasonable. Approximately three-fourths of the physicians who approved of nurse practitioners preferred a straight salary method of reimbursement. Only 4.6% favored a fee for service basis. Although many will continue to be paid on a straight salary basis, as the acceptance and utilization of nurse practitioners grow, the acceptance of fee for service may also increase.

As expected, previous experience and knowledge of nurse practitioners were significantly associated with the acceptance of nurse practitioners. Over half (52.9%) of the physicians reported they had no previous experience with nurse practitioners, and 66.7% did not personally know a physician who employs one. Although 12.8% of the physicians admitted they did not know enough about nurse practitioners to decide whether they approved of the concept, it seems likely that more physicians should have been in this category. At the Governor's Rural Health Conference II in November 1978, physicians repeatedly commented that they had learned more that day about nurse practitioners than through all their previous experience. Thus it appears that much of the physician opposition to nurse practitioners may be due to a lack of knowledge or to a misunderstanding of the nurse practitioner role.

A possible solution to this lack of information is to promote workshops and conferences to help inform physicians and other health care providers about nurse practitioners and other alternatives to health care delivery. The Mississippi State Medical Association, in consort with other appropriate professional organizations, should actively support these workshops and encourage their members to participate. By developing a better understanding of nurse

practitioners, the primary care physicians in Mississippi can work more effectively with nurse practitioners to establish a health care system that delivers quality care to people in areas that are currently underserved.

★★★

University, Mississippi (38677)

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Radiologic Seminar CXCIV: Neonatal Small Left Colon Syndrome

BERNARD I. BLUMENTHAL, M.D.

Jackson, Mississippi

THE INFANT of a diabetic mother is at risk for a multitude of neonatal problems, including neonatal small left colon syndrome.¹ This form of functional intestinal obstruction presents clinically as obstipation and abdominal distention in the first 24 to 72 hours of life and may, if untreated, lead to colon perforation.² This syndrome must be differentiated from Hirschsprung's disease, meconium plug syndrome and colon atresia or stenosis.

The plain film radiograph (See Figure 1) of the abdomen will demonstrate a distal intestinal

obstruction and the presence or absence of free intraperitoneal gas. If free gas is present, the problem is obviously surgical and no further studies are indicated.

The barium enema (See Figure 2) will show a normal caliber rectum, diminished caliber of the sigmoid and descending colon and dilatation of the colon proximal to the splenic flexure. The left colon may appear shortened, lacking the usual tortuosity seen in the normal newborn.

Neonatal small left colon syndrome may be differ-



Figure 1. Prone roentgenogram shows abdominal distention by numerous dilated loops of bowel of varying size.



Figure 2. Barium enema. The colon from the splenic flexure is shortened and of diminished caliber. The proximal colon and small bowel are dilated. Note the normal caliber of the rectum.

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From The Department of Pediatric Radiology, University Medical Center, Jackson, MS.

entiated from Hirschsprung's disease by the normal caliber of the rectum, the smoothness of the colon margins, and the ease with which the infant with NSLCS evacuates the contrast material.

The contrast enema is usually curative with resolution of the bowel distention within 24 hours. In a few infants a second enema may be necessary; if this does not lead to resolution of the bowel distention or if distention recurs a rectal biopsy should be performed to exclude Hirschsprung's disease.

The etiology of NSLCS and its relationship to Hirschsprung's disease is unknown; however,

NSLCS may be the consequence of failure of normal maturation of colonic neural plexuses which become functional following stimulation by the contrast enema. ★★★

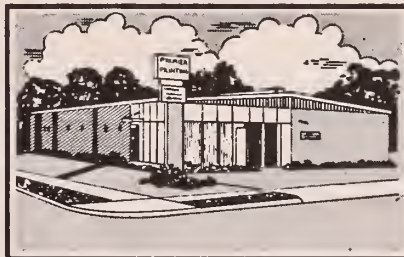
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Licensure and Distribution of Physicians in Mississippi, 1975 and 1978: A Comparative Study

PATSY SILVER

FEW SUBJECTS receive as much attention today as health care. While the topic is vitally important today, it is not an issue which is unique to the modern world. In 1877 Benjamin Disraeli stated, "The health of the people is really the foundation upon which all their happiness and their powers as a state depend." The importance of health is also described in the Arab proverb, "He who has health has hope; and he who has hope has everything."

Those involved with health care planning — and, indeed, all those concerned with health care, whether they are "consumers" or "providers" — are focusing increased attention on three major aspects of health care — its cost, its quality and its accessibility. The recent public opinion survey conducted by Mississippi State Medical Association's Committee to Study Health Needs revealed that Mississippians are concerned about the cost of health care, but that they are pleased with the quality, stating that it is good medical care, and that it is improving. An awareness of the problem of accessibility to health care was manifested in the expression of an urgent need for more doctors in Mississippi. This state, by virtue of its largely rural character, presents special problems of accessibility. While the entire health care system of an area is the result of the interaction of many complex factors, most studies of the problem of accessibility to health care begin with several statistical elements — the number of physicians in an area, their specialties and their geographic distribution.

Physician Population

Figures from the Bureau of Licensure and Certification and the Office of Public Health Statistics of the Mississippi State Board of Health indicate that since 1975 there has been an increase of 317 physicians in the state.

The overall physician/population ratio is one for every 977 people, bettering the 1975 ratio of one for every 1091 people. Comparative figures reveal that Mississippi still has the lowest physician/population

ratio in the nation, however. The national ratio is one physician for every 794 people.

One factor which has evidently contributed to the increase in the total number of physicians in the state is the University of Mississippi School of Medicine. Since the 1955 founding of the school, 1667 physicians have been graduated. Of those who have completed training and are now in practice, 67.4% are practicing in Mississippi, a retention rate which exceeds the 50.2 national average. Table I illustrates physicians licensed by the state of Mississippi during 1975 and 1978 according to totals and active or inactive status. Table II profiles active physicians according to race, sex and age.

TABLE I
PHYSICIANS LICENSED AND LIVING IN MISSISSIPPI

Status	1975	1978
Active	2144	2461
Inactive	57	89
Total	2201	2550

TABLE II
PROFILE OF ACTIVE PHYSICIANS IN MISSISSIPPI

Classification	1975	1978
Race	White	2047
	Black	49
	Indian	4
	Asian	43
	Other	1
Sex	Male	2027
	Female	117
Age	Under 30	190
	30-34	287
	35-39	305
	40-44	301
	45-49	273
	50-54	285
	55-59	192
	60-64	136
	65-69	85
	≥ 70	90

TABLE III
PHYSICIANS RENDERING PRIMARY CARE IN MISSISSIPPI

Specialty	1975		1978	
	NUMBER	% OF TOTAL	NUMBER	% OF TOTAL
Family Practice	219	10	281	11
General Practice	284	13	383	16
Ob/Gyn	130	6	171	7
Pediatrics	116	5	157	6
Internal Medicine	196	9	259	11

Distribution of Physicians

The American Medical Association, in a 1970 policy statement, declared that the "shortage of health services and personnel is not due merely to an insufficient number of health professionals across-the-board. Maldistribution of practitioners geographically by profession, and by specialty, is an equally important factor in depriving communities of an adequate supply of health services."

While the increase in Mississippi's total physician population is certainly encouraging, the problems of maldistribution by specialty and geography remain.

It is generally accepted that the greatest area of need in Mississippi on the basis of medical specialty is more primary care physicians. One encouraging indication that this need is being met is the fact that of the 317 more physicians, 311 of them (98%) are engaged in primary care. Table III illustrates the 1975 and 1978 totals of primary care practitioners.

As to type of practice, between 1975 and 1978 the number of solo practitioners increased by 77, while those in partnerships increased by 133. This change is illustrated in Table IV.

The number of hospital-based physicians increased from 465 in 1975 to 611 three years later. There was also an increase in clinic-based physicians from 92 to 123. Office practitioners increased from 1193 to 1305. The number of physicians employed by federal health facilities grew from 106 to 117. The school of medicine had an increase of from 185 to 210; the number of physicians active in other schools doubled — from 9 in 1975 to 18 in 1978. All other principal settings of primary activity (nursing homes, health plan facilities, patients' homes, etc.) remained about the same.

The geographical distribution of Mississippi's physicians is a problem which presents special challenges. The Mississippi State Medical Association's Committee to Study Health Needs recently addressed this problem and made certain recommendations for solutions, including regional planning and expanded recruitment efforts. One especially graphic example of geographic variations is the rural county of Amite, which has one physician for every 12,900 people while neighboring Pike County has one physician for every 912 people. Table V demonstrates distribution of physicians by county in 1975 and 1978. During that three-year interval, there was a decrease in the physician population of 17 of the more rural counties.

Currently in Mississippi, expanded physician recruitment programs are being initiated, emphasis on primary care residencies by the medical school is continuing, regional health care centers are being studied, and allied health personnel roles are being expanded — all efforts to solve the problem of accessibility to good medical care. The need is real, and the solutions are being sought.

At the same time, there is the recognition of the special role socioeconomic factors such as income, nutrition and education play in total health care, and

TABLE IV
PRIMARY FORM OF EMPLOYMENT BY ACTIVE PHYSICIANS IN MISSISSIPPI

	Self Employed		Nongovernmental Employer			Governmental Employer			Other		Total
	SOLO PRACTICE	PARTNER-SHIP	SOLO PRACTITIONER	PARTNER-SHIP	OTHER*	LOCAL & COUNTY	STATE	FEDERAL	Other Form†	Unknown	
1975	777	679	11	71	81	9	367	115	7	27	2144
1978	854	812	22	114	73	8	434	123	4	17	2461

* Refers to trade establishment, group health plan and other nongovernmental employer.

† Refers to unpaid voluntary worker and other than those listed.

TABLE V
ACTIVE PHYSICIANS BY COUNTY IN MISSISSIPPI

	1975	1978		1975	1978
Adams	52	64	Leflore	30	33
Alcorn	22	25	Lincoln	16	21
Amite	3	1	Lowndes	41	45
Attala	7	7	Madison	13	14
Benton	1	1	Marion	11	13
Bolivar	29	27	Marshall	9	11
Calhoun	5	7	Monroe	22	23
Carroll	3	3	Montgomery	3	4
Chickasaw	10	14	Neshoba	5	9
Choctaw	4	3	Newton	7	9
Claiborne	3	2	Noxubee	5	4
Clarke	4	5	Oktibbeha	18	30
Clay	8	9	Panola	13	16
Coahoma	27	31	Pearl River	13	22
Copiah	12	11	Perry	3	4
Covington	5	6	Pike	31	39
De Soto	9	7	Pontotoc	7	7
Forrest	95	107	Prentiss	12	12
Franklin	4	4	Quitman	4	4
George	6	7	Rankin	35	55
Greene	3	2	Scott	11	9
Grenada	17	21	Sharkey	3	3
Hancock	7	9	Simpson	14	11
Harrison	183	201	Smith	4	4
Hinds	682	779	Stone	5	3
Holmes	9	9	Sunflower	12	16
Humphreys	5	5	Tallahatchie	7	4
Issaquena	0	0	Tate	6	9
Itawamba	4	5	Tippah	9	7
Jackson	73	94	Tishomingo	14	15
Jasper	6	6	Tunica	4	7
Jefferson	6	4	Union	9	10
Jefferson Davis	3	4	Walthall	6	9
Jones	57	64	Warren	60	66
Kemper	1	3	Washington	62	71
Lafayette	25	32	Wayne	6	9
Lamar	5	4	Webster	4	3
Lauderdale	110	123	Wilkinson	6	7
Lawrence	3	3	Winston	7	7
Leake	9	6	Yalobusha	4	5
Lee	65	86	Yazoo	1	10
			Total	2144	2461

expanded health education programs have been identified as important factors in the solution of health care problems in a rural society. As Dr. Richard E. Palmer, then president-elect of the American Medical Association, stated before a 1976 National Conference on Rural Health, "Health is a

state of total positive functioning . . . not just the absence of disease." The ongoing efforts to provide increased accessibility to professional care, combined with the proposed expansion of health education programs, are expected to have a beneficial effect on the health of the people in rural Mississippi.

Mississippi State Medical Association Auxiliary

1979 Convention

“Shape up for Life,” a new health education campaign launched by the AMA and the AMA Auxiliary during the 1979 convention, is a two-year effort aimed at keeping Americans healthy by making them aware that proper diet and exercise are vital to good health and fitness. It represents one of the Auxiliary’s major goals for the coming year: promoting preventive medicine.

The 565 members attending the July convention in Chicago learned that two other Auxiliary goals will be to promote sound medical legislation and to increase support for the AMA Education and Research Foundation. (An Auxiliary check in the amount of \$1,662,190 presented during AMA’s Annual Meeting that same week was a record-setting contribution to the ERF.)

Keynote speaker Richard M. Scammon, director of Elections Research Center in Washington, DC, discussed “The Mood of America.” He said Americans are confused in their views toward institutions and government, and they want definite aims and goals to be established. He remarked that there is a “deep yearning on the part of most Americans for leadership,” and he noted that this will affect elections and ultimately, legislation.

In her inaugural address, national president Mrs. Ben Johnson, Jr. remarked that the Auxiliary’s programs give us a common goal to work toward — to help the people in our communities as well as the medical profession. She reminded us that we must have courage to work toward our goals, and we must have optimism that our changes will make us more effective. Mrs. Johnson emphasized that these three things — purpose, courage and optimism — are essential if we are going to be able to change with a changing world.

We were especially proud that Jean Hill of Hollandale, wife of Dr. Ed Hill, was elected to the Board of Directors of the AMA Auxiliary. She will be one of only eight directors elected from districts throughout the nation. Our MSMA Auxiliary received an award for having an increase in membership for three straight years. We are very proud of this accomplishment and will continue to strive for increased membership.

Visiting your local Auxiliary sometime this year will be a highlight of my year as MSMA Auxiliary president. I look forward to the opportunity to learn firsthand from you the needs of our state and to pass on to others the inspiration of what you are doing. ★★★

MRS. JIM C. BARNETT
President, MSMA Auxiliary



The President Speaking



A Big Step Forward — A State Medical Examiner

GERALD P. GABLE, M.D.
Hattiesburg, Mississippi

Many of our problems of state government in Mississippi are attributable to the fact that we are trying to operate our state, in 1979, under a constitution written in 1890, which by today's standards is archaic. As it pertains to one facet of medicine, one of the most glaring deficits in the constitution is no provision for a state medical examiner. For almost a century, every four years the citizens in each county have elected a "coroner and ranger" to determine the cause of death in people who died unexpectedly and without benefit of a recent examination or treatment by a physician. Many of these elected officials had no educational or other medical background qualifications and frequently convened coroner juries equally unqualified. The potential for murder by poisoning or other means under this system is incredible. One wonders how many "arsenic and old lace" decedents have had their death certificates signed by coroners listing the cause of death as "natural causes."

This problem was finally addressed by the legislature with the passage of the MSMA-sponsored Medical Examiner's Act of 1974, which provided for the establishment of a state medical examiner office attached to the University Medical Center and headed by a certified forensic pathologist. The law likewise provides that this physician be appointed by the dean of the University of Mississippi School of Medicine from a list of nominees submitted jointly by MSMA and the Mississippi Association of Pathologists.

This law finally came to fruition in July with the appointment by Dean Nelson of Dr. Faye Spruill as state medical examiner. Dr. Spruill is a native Mississippian who is eminently qualified, having previously served as deputy chief medical examiner of the state of Rhode Island and as medical examiner for the City of St. Louis. We welcome Dr. Spruill home to fill a great need, and I am sure that all of the physicians of the state offer their cooperation and best wishes to her in her new office. ★★★

Malpractice Survival

The Mississippi Medical Fraternal and Educational Society (MMFES) has recently mailed to the membership a pamphlet entitled "Medical Practice Survival Kit for Physicians." If you have not read this information, it is well worth spending a few minutes to study. A doctor faced with a malpractice suit, even though he is perfectly blameless, is in for a harrowing, time-consuming ordeal to prove his innocence. Once the suit goes to trial, the jury must be convinced to render a verdict based not on sentiment but on the true facts of the case.

The "Survival Kit" offers excellent advice in the prevention of lawsuits before they start, which is the only way the malpractice crisis can be brought under control.

An example of truth in humor was a recently seen bumper sticker which read: "Become a doctor — support a lawyer." If this is a sign of the times, God help us!

GEORGE H. MARTIN, M.D.
Associate Editor
Vicksburg, MS

Health Care Costs

(Editor's Note: The following remarks of Senator John C. Stennis were carried in his July 9 "Washington Report.")

Provision of health care for American citizens has become a major political issue. The problem of making good medical services available at affordable costs is likely to provide an even greater challenge in the future.

Medical costs have been rising at an alarming rate. More and more Americans are finding a larger share of their income going for health care.

We have achieved great progress in the field of medicine. Many of our communities have built fine hospitals, equipped with life-saving equipment, staffed with highly-trained professionals and stocked with wonder drugs. Development of these high standards in health care have been necessarily expensive, and now we are faced with the possibility that the outstanding health services which are available may be more than many individuals can afford.

Health insurance has developed into a large and very necessary business enterprise which has served us well. The government has also gotten into the health care field through such programs as medicaid and medicare and through providing assistance to state and local governments in their attempts to provide better health care.

However, health insurance costs have necessarily gone up with the cost of providing the services. Federal, state and local governments are finding it increasingly difficult to provide the financial assistance required to assure the availability of good health care of American citizens. Thus, we are faced with a cost problem for which we must find a solution.

The problem is a major one, and a major effort will be required to meet the challenge. Unless we take some action to reverse the current trend, I fear we are in danger of falling to socialized medicine. We should avoid that direction with all the effort we can muster. The doctors, nurses, pharmacists, medical technicians, hospital administrators, and all others who make up the great medical profession must take the lead in the fight to retain independent medical care. They best understand the factors which have caused health care costs to soar, and they are best equipped to propose solutions to the problem.

I have faith in the capability of our nation to meet this challenge as we have others we have been faced with in the past. We have been tremendously successful in the development of quality health care. Surely we will also be successful in finding a way to make that health care affordable to those who need it.

LETTERS

SIRS: As director of the state agency charged with the responsibility of protecting the public from the harmful effects of excessive radiation, I wish to respond to Dr. Myron W. Lockey's timely and thoughtful editorial in the July 1979 JMSMA.

The State Board of Health Radiological Health Program, authorized under the State Radiological Health Act of 1964, amended 1976, includes staff personnel with training and experience in radiation physics, chemistry, and biology. Our radiation laboratory is equipped with instrumentation necessary for the detection of radioactivity in water, milk, soil, air, vegetation, and animal tissue.

The Radiological Health Program operates under the guidance of the State Radiation Advisory Council, authorized under state law and including physicians and other medical users of x-ray, health physicists, nuclear engineers, and legislators. The program is supported from state funds, user fees and federal contract. The budget for 1979-1980 is \$282,251; total staff number 14.

We operate as an agreement state with the U. S. Nuclear Regulatory Commission. Under this status, we license and monitor all users of radioactive materials.

The radiological health staff in our agency is preparing the state radiological emergency response plan for fixed nuclear facilities in cooperation with the State Civil Defense Council. Many people representing various disciplines, agencies and industries have cooperated to produce a plan that will meet our need to protect the public; this plan will be tested and critiqued prior to the initial operation of the Grand Gulf Nuclear Power Plant. When the plant is operational, both it and the emergency response plan will be closely monitored by our staff and the plan will be updated as needed.

The key to the success of the plan will be well-informed publics — industry, the health care field, law enforcement agencies, the news media, and the general public. A public awareness campaign on the emergency response plan will equip the various segments of the populace with the information they need to respond in an emergency situation without creating a crisis.

Neither we nor representatives from federal agencies know exactly what impact the accident at Three Mile Island Nuclear Power Plant will have on local and state emergency plans. But a joint task force has

recommended that two emergency planning zones be established around light water nuclear power plants: an inner zone of about 10 miles for the plume exposure pathway and an outer zone of about 50 miles for the ingestion exposure pathway. Our current plan covers the plume exposure pathway. Local municipalities and counties are developing their plans which will supplement the state plan.

The state radiological emergency response plan identifies local community hospitals which could provide initial medical care and metropolitan medical centers which are better equipped for further diagnosis and treatment. Since Mississippi lacks a medical facility fully equipped to care for persons who have received high doses of radiation, the state plan calls for use of the Oak Ridge health care facility and/or its medical staff as consultants.

The Vicksburg Hospital has developed an emergency plan as a primary facility in response to an accident at the Grand Gulf Nuclear Power Plant; it has been successfully tested. Several hospitals in Jackson have participated in emergency drills with the Civil Defense organization in which simulated radioactive materials were involved; the drills included medical triage of victims.

In the accident at Three Mile Island, a few employees did receive rather high exposures while performing their duties, and a large number of local citizens were whole body-counted for the presence of radioactivity, but no radiation-injured persons required medical attention.

Health facilities statewide use diagnostic and therapeutic radiology almost daily. Facilities, except those federally controlled, which produce radioactive wastes are licensed through the State Board of Health. The state radiation regulations are very specific as to the disposal of radioactive wastes, and licensed facilities are disposing of their waste in a responsible manner.

Safety in and around nuclear power plants is a joint responsibility of federal agencies, the State Board of Health, other state agencies, and the utility company.

The State Board of Health and the utility companies monitor the environment for radiation, and monitoring begins during the construction of a nuclear power facility and certainly before the Nuclear Regulatory Commission issues an operating license. We check routinely for the effectiveness of the controls and the monitoring equipment.

Nuclear power promises an additional energy source at a time when all energy alternatives must be explored and utilized. It also produces a possible health hazard if not properly regulated. The State

Board of Health is committed to a system of control that will protect the people of Mississippi from potential harm and provide a workable plan of emergency response should an accident occur.

We welcome the cooperation of all physicians in our combined efforts to assure that all Mississippians have the minimal exposure possible to any and all man-made sources of ionizing radiation; we should keep in mind, however, that for the present our major source of human exposure is from medical use of x-ray. Every effort should be made to reduce exposure to x-ray. Examples of possible excess exposure are routine requirements for chest x-ray on hospital admission and the repeating of diagnostic x-ray studies on referral of patients.

I appreciate the editorial by Dr. Lockey and the opportunity to respond.

ALTON B. COBB, M.D.
State Health Officer
P.O. Box 1700
Jackson, MS 39205

Medico-Legal Brief

Physician Expelled From County Medical Society

A trial court properly dismissed a complaint by a physician who contended that his dismissal from the county medical society was improper, a Kentucky appellate court ruled.

In February 1976, a member of the county medical society complained about the physician's activities. The Society's Judicial Council advised the physician by letter of the reported irregularities and invited him to appear for an informal investigation. In March, he appeared at the hearing, and in April he was informed that the Council was not satisfied with his answers. He was also given notice of the Society's bylaws governing a formal hearing and he was informed that unless he requested a formal hearing the Council would recommend that the Society expel him.

The physician then requested a formal hearing, and the Council advised him that he was charged with violating the Principles of Medical Ethics of the AMA and the Jefferson County Medical Society By-Laws. The physician was charged with violating the following ethical principles: writing unnecessary prescriptions solely for financial gain, writing undated and postdated prescriptions, writing prescriptions for diet medication for the same patient under

several names and issuing prescriptions to various patients in such close succession that they were clearly for other than medical purposes.

After a hearing at which the physician and his attorney were present and offered testimony, the Council recommended expulsion. The medical society then took steps to expel him, and he filed suit to restrain the Society's action. A trial court granted summary judgment for the Society and dissolved a temporary injunction, which it had granted earlier.

On appeal, the decision was affirmed. The Judicial Council had the sole authority to weigh the evidence, and its actions were not arbitrary or capricious. The fact that there was no technical formality in the expulsion proceedings was not a basis for court review. The physician was not denied due process, since he was fully apprised of the charges, the witnesses and the evidence against him, the court concluded. — *Kirk v. Jefferson County Medical Society*, 577 S.W.2d 419 (Ky.Ct. of App., Oct. 6, 1978; rehearing denied, Nov. 3, 1978; review denied, March 13, 1979)

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POSTGRADUATE CALENDAR

Oct. 8-12, 1979

PRACTICE OF ELECTROCARDIOGRAPHY
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine and the Medical Center Division of Continuing Health Professional Education.

Coordinator: Thomas M. Blake, M.D., professor of medicine and chief of cardiology and of electrocardiography.

This course is designed for physicians who use electrocardiograms in their regular practice. Fee: to be announced. Credit: 40 contact hours, 4 CEU, Category 1, AMA.

Oct. 12-13, 1979

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Anesthesiology and the Medical Center Division of Continuing Health Professional Education.

Coordinator: Thomas J. Herrin, M.D., associate professor of anesthesiology, University of Mississippi School of Medicine.

This course is open to physicians who are certified by the American Heart Association in basic life support and who are actively engaged in advanced cardiac life support on a daily basis. Fee: \$110. Credit: 12 contact hours, Category 1, AMA.

Nov. 1-2, 1979

MISSISSIPPI PERINATAL POSTGRADUATE COURSE
Jackson Hilton, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Obstetrics and Gynecology, the Department of Pediatrics Division of Newborn Medicine and the Medical Center Division of Continuing Health Professional Education.

Coordinators: John C. Morrison, M.D., professor of obstetrics and gynecology, and Philip G. Rhodes, M.D., associate professor of pediatrics and newborn medicine division chief.

This course is designed as an update in perinatal care. Topics will include infections in the neonate, management of the pregnant diabetic and the organization of immediate newborn care. Fee: \$120. Credit, 13 contact hours, 1.3 CEU, Category 1, AMA; AAFP.

Nov. 16, 1979

PEDIATRIC NEUROSURGERY
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Neurosurgery and the Medical Center Division of Continuing Health Professional Education.

Coordinators: Robert A. Sanford, M.D., associate professor of neurosurgery, and Andrew D. Parent, M.D., assistant professor of neurosurgery (part-time).

This course will review some recent advances in evaluation and management of pediatric patients with neurosurgical problems. Fee: \$50. Credit: 5.5 contact hours, .55 CEU, Category 1, AMA.

Dec. 6-8, 1979

FAMILY MEDICINE REVIEW
Holiday Inn Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Family Medicine and the Medical Center Division of Continuing Health Professional Education.

Coordinators: T. Walter Treadwell, M.D., professor of family medicine, and Henry J. C. Scrimgeour, M.D., assistant professor of family medicine.

This three-day course is offered as a refresher for primary care physicians. Discussions will cover new developments in patient care. Fee: \$85. Credit: 18 contact hours, 1.8 CEU, Category 1, AMA; AAFP.

FUTURE CALENDAR

Jan. 7-11, 1980

PRACTICE OF ELECTROCARDIOGRAPHY
University Medical Center, Jackson

Jan. 24-26, 1980

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
University Medical Center, Jackson

Feb. 7-9, 1980

RENAL UPDATE
Holiday Inn Medical Center, Jackson.

MEDICAL ORGANIZATION

Board of Trustees Conducts Summer Meeting

MSMA's Board of Trustees held its regular summer meeting on July 26-27, and considered a full agenda of business including referrals from the May meeting of the MSMA House of Delegates and other special projects.

The Board officially announced plans for the association to participate in an AMA-sponsored project to improve health care in jails funded by the Law Enforcement Assistance Agency.

In other actions, based on approval of the MSMA House of Delegates, the Board appointed a committee to monitor federal/state health programs. The Board also acted to strengthen the association's physician recruitment program for non-urban areas and formally went on record to urge expansion of the number of family practice residencies and preceptorships at the University Medical Center.

The Board approved plans for the association to conduct a professional communications program sponsored by Burroughs-Wellcome.

Based on actions of the MSMA House of Delegates and other legislative requests, the Board approved a 1980 MSMA legislative program which will support bills to: require health education in all primary and secondary schools; recognize irreversible cessation of brain function as a cause of death; place a tax on tobacco products to fund hypertension and cancer control programs; require re-examination for a driver's license every 5 years for those under 65, and ever 2 years for those over 65; provide better funding of existing programs for immunization, venereal disease control and tuberculosis control conducted by the Mississippi State Board of Health; provide \$35,000 per year to the Mississippi State Board of Health for public education and assistance to local communities for fluoridation programs; remove the \$250 ceiling on emergency transportation of newborns; fund a statewide genetic screening program for children; and increase the State Hospital Commission's per diem to public hospitals for charity patients to at least the lowest per diem of the state's charity hospitals.

The Board appointed committees to study formulation of an MSMA-sponsored information program to address health issues in the state and to investigate future MSMA office building requirements. The Board set its next meeting for Dec. 12-13, 1979.

Dr. Spruill Becomes First State Medical Examiner

Dr. Faye Spruill has been named Mississippi's first state medical examiner.

The Crystal Springs native, who will establish the state's program of death investigation, assumed the new position in July.

A board certified forensic pathologist, Dr. Spruill had been deputy chief medical examiner for the City of St. Louis and assistant professor of forensic and environmental pathology at St. Louis University School of Medicine since 1977. From 1974-1977, she was deputy chief medical examiner for Rhode Island and a clinical assistant professor of pathology at Brown University.

The Mississippian completed her undergraduate study at Millsaps College and earned the M.D. at the Medical Center in 1964. She took residencies in anatomic pathology at the Medical Center, M. D. Anderson Hospital and Tumor Institute and at Baylor University and completed her training in forensic pathology at the Southwest Institute of Forensic Sciences.

The state medical examiner's offices are located at the Medical Center, where Dr. Spruill will also serve as a clinical associate professor of pathology on the UMC faculty.

Dr. Johnson Is Installed As MAFP President



Dr. Edgar Johnson of Hattiesburg, left, was recently installed as the 30th president of the Mississippi Academy of Family Physicians by Dr. John S. Derryberry of Shelbyville, TN, right, president-elect of the American Academy of Family Physicians.

MAFP Holds Annual Meeting

Dr. Edgar Johnson of Hattiesburg was installed as president of the Mississippi Academy of Family Physicians at the academy's recent annual meeting in Biloxi. Dr. John S. Derryberry of Shelbyville, TN, president-elect of the American Academy of Family Physicians, conducted the installation ceremonies.

Officers elected for the coming year, in addition to Dr. Johnson, are: Dr. J. Edward Hill of Hollandale, president-elect; Dr. Ben E. Kitchens of Iuka, vice president; and Dr. Louis Rubenstein of Ocean Springs, secretary-treasurer.

Newly-elected directors are: Drs. Dayton E. Whites of Lucedale, Elmo P. Gabbert of Meadville, William M. Gillespie of Meridian, Jerome B. Hirsch of Greenville and Robert B. Townes of Grenada. Dr. Charles R. Jenkins of Laurel was elected delegate to the AAFP, and Dr. J. Edward Hill of Hollandale was named alternate delegate.

Memorial awards were presented to Dr. William H. Parker of Heidelberg for outstanding service to family medicine in Mississippi and to Lee Horn, a student at the University of Mississippi School of Medicine.

During the three-day meeting more than 177 family physicians from Mississippi and neighboring states obtained advance continuing medical education credits through lectures, autotutors, cardiopulmonary resuscitation course, films and a preceptor workshop.

MAFP Elects New Officers



Dr. Louis Rubenstein of Ocean Springs, right, was recently elected secretary-treasurer of the Mississippi Academy of Family Physicians. He is pictured with newly elected directors of MAFP, from left, Dr. Dayton Whites of Lucedale, Dr. William Gillespie of Meridian, Dr. Elmo Gabbert of Meadville, Dr. Jerome Hirsch of Greenville, and Dr. Robert Townes of Grenada.

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In Jackson: 922-6811

MSMA Auxiliary Officers Attend Chicago Convention



Officers of MSMA Auxiliary who attended the recent American Medical Association Auxiliary convention are, from left, Mrs. Curtis Roberts of Brandon, president-elect; Mrs. Jim C. Barnett of Brookhaven, president; Mrs. G. S. Rowlett of Vicksburg, immediate past president; and Mrs. John Estess of Hollandale, first vice president.

Oncology Seminar Slated at MBMC

The Mississippi Baptist Medical Center will sponsor an oncology seminar Oct. 26-27, in Jackson. The program will cover a broad range of cancer information, including cancer of multiple organ systems and diagnostic problems.

Guest speaker will be Dr. Richard Martin of M. D. Anderson Hospital in Houston, TX.

Additional information may be obtained by writing to Jean May, MBMC, 1225 North State St., Jackson, MS 39201.

PERSONALS

KEITH ALDRIDGE of Gulfport has opened his office for the practice of family medicine in Raleigh.

BRUCE ATKINSON announces the removal of his practice of internal medicine from Amory to Tupelo, where he is affiliated with Internal Medicine Associates.

JOHN LARRY BLACK announces the opening of his general medicine practice in Senatobia.

BRUCE A. BULLWINKLE, general surgeon, has joined the New Albany Surgical Group.

GEORGE R. BUSH has joined the Boone Clinic in Laurel for the practice of family medicine.

MICHAEL H. CARTER, JR. of Greenwood announces the association of S. H. JEFF LAMB DIN for the practice of otolaryngology, allergy and cosmetic facial surgery.

Children's Medical Group, P.A. (Drs. ABNEY, CONNER, FREEMAN, HENDRICK, SISTRUNK, WELCH and WOMACK) announce the association of WILLIAM N. SMITH, JR. and THOMAS W. CHRISTIAN. Dr. Smith will practice pediatrics and Dr. Christian will practice pediatrics and pediatric allergy.

CRAWFORD H. CLEVELAND, JR. of Gulfport announces the opening of his office for the practice of internal medicine in association with THOMAS L. GRAVES and RICHARD H. TILLEY.

JOHN CROSS, a native of Scotland, has joined the Charleston Clinic for the practice of general surgery. Dr. Cross formerly practiced in Canada.

EDWIN G. EGGER announces the relocation of his office for the practice of ophthalmology to 115 E. Starling St. in Greenville.

CARL G. EVERS of UMC was a delegate to the Section on Medical Schools meeting of the American Medical Association in Chicago.

FRED GUIDRY of Jackson spoke at the recent annual scientific assembly of the Mississippi Academy of Family Physicians.

ROBERT R. HERRINGTON, III has joined the Family Clinic in Columbia for the practice of family medicine.

W. MERRILL HICKS, JR. has opened his practice of internal medicine at 1317 River Road in Greenwood.

WILLIAM C. HOPPER, JR. announces his association with the Gulf Coast Orthopedic Clinic, P.A. for the practice of orthopedic surgery.

THOMAS R. HOWELL announces the opening of his office for the practice of general surgery at 120 South 11th Ave. in Laurel.

JOE ALAN JACKSON has established his practice of neurology at the Coastal Medical Center in Gulfport.

T. D. LAMPTON of UMC was named an honorary member of the Mississippi Hospital Association during their recent annual meeting in Biloxi.

DEWEY H. LANE of Pascagoula was named regional leader for the Mississippi Economic Council's M. B. Swayze Foundation fund drive.

W. R. LOCKWOOD of UMC presented a paper at the recent Infectious Disease Conference in New Orleans.

BILLY WAYNE LONG, a Tupelo native, has been named to the faculty of the department of medicine of the University of Pennsylvania Hospital.

GEORGE A. MARSH has associated with WILLIAM G. RILEY, JOHN D. MCEACHIN and WILLIAM B. SIMMONS in Meridian, for the practice of pediatrics.

ELDON D. MCCLAIN of Greenville, NC has been named head of the pathology department at Howard Memorial Hospital in Biloxi.

JAMES N. MCLEOD, III announces the relocation of his internal medicine practice to Suite 420, St. Dominic Medical Offices, 971 Lakeland Dr. in Jackson.

MARTIN M. NEWCOMB has opened an office for the practice of medical oncology at Hinds Professional Building in Jackson.

EDWIN NORRIS has associated with the Wiggins Clinic for the practice of family medicine.

PERSONALS / Continued

ED NORTH of Jackson was installed as president of the National Exchange Club in July.

JOHN E. RAWSON of Jackson announces the association of CHARLES A. FRIEDMAN for the practice of newborn medicine at Hinds General Hospital.

ROBERT RITTER of Jackson spoke on "Mental Health of the Physician" at the recent annual meeting of the Mississippi Academy of Family Physicians in Biloxi.

POLLY M. SEPLILVADO has joined the Street Clinic in Vicksburg for the practice of internal medicine, specializing in rheumatology.

CHARLES L. SIMPSON has joined the medical staff of Houston Hospital, specializing in general surgery.

JASON V. SMITH has joined the Eye, Ear, Nose and Throat Hospital in Gulfport (Drs. ROUSE, HAYES, CLEVELAND and BERTUCCI) to practice ear, nose, throat and facial plastic surgery.

MCKAMY SMITH announces his association with the Jackson Heart Clinic for the practice of cardiology and cardiac catheterization.

ROBERT R. SMITH of UMC presented a paper and moderated a session of the Sixth European Neurosurgical Congress in Amsterdam, Netherlands, and was in Paris, France for the Second International Workshop on Cerebral Vasospasm in July.

EARL T. STUBBLEFIELD of Jackson announces the association of JOEL G. PAYNE, JR. for the practice of obstetrics and gynecology.

RALPH E. SULSER announces his association with the Internal Medicine Group at 962 North St. in Jackson.

ELSE TRACY has opened an office for the practice of psychiatry at 3106 Canty St. in Pascagoula.

SALIM WAHAB of Harlan, KY has opened his surgery practice at the Tunica Clinic.

MICHAEL S. WARD has joined the Rush Medical Group in Meridian. He will practice general pediatrics and adolescent medicine.

REGINALD WHITE of East Mississippi State Hospital in Meridian was speaker for the recent meeting of the Lauderdale County Mental Health Association.

JON WINTER of Tampa, FL has established his practice of family medicine and surgery at the Calhoun County Medical Facility in Bruce.

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Brief Summary

INDICATIONS: For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

CONTRAINDICATIONS: Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

PRECAUTIONS: Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication. Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

ADVERSE REACTIONS: Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued.

DOSAGE AND ADMINISTRATION:

1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

U.S. Patent 2,985,558

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Nocturnal recumbency leg muscle cramping is frequently an unwelcome bedfellow for many patients—especially those with arthritis, diabetes or peripheral vascular disease...consider Quinamm...simple, convenient dosage—usually just one tablet at bedtime...can provide restful, welcome sleep without night leg cramps.

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*Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg. per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily. Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding. Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted. Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose, Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose, Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

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NEW MEMBERS

COOK, JAMES WALTER, Pearl. Born Jackson, MS, Dec. 9, 1939; M.D., University of Mississippi School of Medicine, Jackson, 1976; interned University Medical Center, Jackson, one year; elected by Central Medical Society.

GOULD, THEODORE, Charleston. Born Toronto, Canada, Dec. 23, 1945; M.D., University of Toronto Faculty of Medicine, Toronto, Ontario, Canada, 1972; interned Foothills Hospital, Calgary, Alberta, Canada, 1972-73; surgery residency, St. Joseph's Hospital, Hamilton, Ontario, Canada, 1974-75; elected by Clarksdale and Six Counties Medical Society.

HOLMAN, CHARLES M., JR., Biloxi. Born Atlanta, GA, Dec. 19, 1944; M.D., Emory University School of Medicine, Atlanta, GA, 1971; interned Vanderbilt University, Nashville, TN, 1971-72; surgery residency, same, 1972-73; urology residency, same, 1973-76; elected by Coast Counties Medical Society.

MITCHELL, LOUIS A., Greenwood. Born Atlanta, GA, Aug. 18, 1946; M.D., Medical College of Georgia, Augusta, 1972; interned Wilford Hall Medical Center, Lackland AFB, TX, 1972-73; anesthesiology residency, same, 1973-75; elected by Delta Medical Society.

MYERS, BEVERLY WOOD, Gulfport. Born Starkville, MS, Aug. 17, 1942; M.D., University of Mississippi School of Medicine, Jackson, 1967; interned Parkland Memorial Hospital, Dallas, TX, 1967-68; internal medicine residency, same, 1968-69; internal medicine residency, Baylor Medical Center, Dallas, TX, 1973-75; rheumatology residency, University of Tennessee, Memphis, 1976-78; elected by Coast Counties Medical Society.

RICHEY, JOHN V., Jackson. Born Baton Rouge, LA, May 28, 1945; M.D., Louisiana State University School of Medicine, New Orleans, 1970; interned University of Texas, Galveston, 1970-71; anesthesiology residency, same, 1971-73; elected by Central Medical Society.

WONG, S. H., Gulfport. Born Georgetown, Guyana, May 13, 1938; M.D., Faculty Medical University College, Kingston, Jamaica, 1960; interned University Hospital, Kingston, Jamaica, 1961; surgery residency, Baylor Medical Center, Dallas, TX, 1961-63; surgery residency, Pennsylvania Hospital,

Philadelphia, 1963-67; Memorial Hospital for Cancer, New York, NY, 1968-69; elected by Coast Counties Medical Society.

Dr. John C. Morrison Joins UMC Staff

Dr. John Coulter Morrison has been named professor of obstetrics and gynecology in the School of Medicine at the University of Mississippi Medical Center.

Dr. Norman C. Nelson, UMC vice chancellor and School of Medicine dean, announced his July 1 appointment following approval by the Board of Trustees, State Institutions of Higher Learning.

Associate professor of obstetrics and gynecology at the University of Tennessee Center for the Health Sciences since 1975, Dr. Morrison is a B.S. graduate of Memphis State. He earned the M.D. at the Tennessee medical school, and took residency training at City of Memphis Hospital.

A diplomate of the American College of Obstetricians and Gynecologists and a member of the American College of Surgeons, Dr. Morrison is immediate past president of the Society for Obstetric Anesthesia and Perinatology. He earned the certificate of merit award given by the Central Association of Obstetricians and Gynecologists in 1977.

Dr. Morrison is a member of the editorial board for the International Association for Sickle Cell Disease and is consulting editor to *New England Journal of Medicine*, *American Journal of Obstetrics and Gynecology*, and the *Journal of Obstetrics and Gynecology*.

Endocrinology Seminar Is Next Month

A continuing medical education seminar, "Update on Office Endocrinology," will be conducted at Forrest General Hospital in Hattiesburg, Oct. 25. Sponsors are the Hattiesburg Clinic, P.A. and Forrest General Hospital.

Scheduled speakers are Dr. Frank Riddick of the Oschner Foundation in New Orleans; Dr. James Givens of the University of Tennessee, Memphis; and Dr. William Bates, University Medical Center, Jackson.

Topics for discussion will include thyroid disease, pituitary/adrenal diseases, evaluation of the postmenopausal patient and evaluation of hirsutism.

For more information contact the continuing education department, Hattiesburg Clinic, P.A., 415 South 28th Ave., Hattiesburg, MS 39401.

Dr. Traxler Receives Jaquith Award



Dr. Walter Thomas Traxler, second from left, received the second annual William Jaquith Award presented by the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center. Sandoz Pharmaceuticals sponsors the award. Department chairman Dr. Edgar Draper, right, made the presentation. The award, named in honor of the state director of mental health, goes to the UMC psychiatry resident who shows the greatest promise during postgraduate training. With them are, from left, Jim McLoughlin, Sandoz medical science liaison, and Dr. Glenn Anderson, director of the Department of Mental Health's mental health division.

UMC Staff Appointments Are Announced

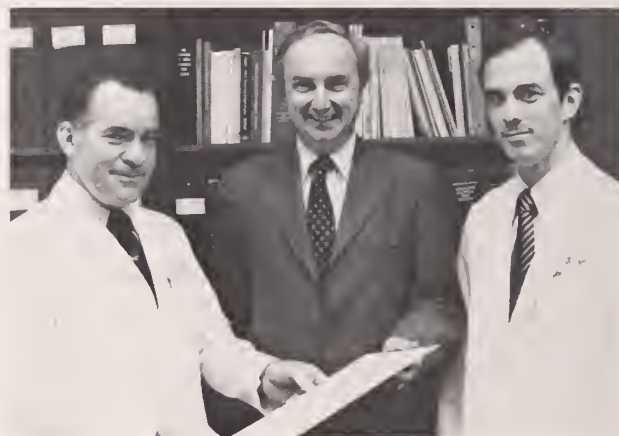
Three new division chiefs have been named in the School of Medicine at the University of Mississippi Medical Center, and two assistant professors and an instructor have joined UMC faculties, according to Dr. Norman C. Nelson, UMC vice chancellor and medical school dean.

In the Department of Surgery, Dr. Frederick Heckler was named director of the division of plastic surgery. New chief of the division of otolaryngology is Dr. Myron Lockey.

The division of hematology and oncology in the Department of Medicine has been separated into two divisions. Dr. J. Tate Thigpen is now director of the oncology division, and Dr. Francis Morrison is director of the division of hematology.

New faculty members include Dr. Nancy Lea Krejmas, assistant professor of pediatrics (hematology-oncology); Dr. Marvin Cuchens, assistant professor of microbiology; and Dr. Diana Margaret Hunt, instructor in biochemistry.

UMC Receives Certificate of Approval



University Hospital at the University of Mississippi Medical Center received a three-year certificate of approval for its multidisciplinary cancer program from the American College of Surgeons Commission on Cancer. University Hospital director William T. Newell, center, accepted the certificate from Dr. G. V. Smith, left, and Dr. J. Tate Thigpen. Dr. Smith is professor of surgery at the Medical Center and chairman of the commission's field liaison program. Dr. Thigpen, UMC associate professor of medicine and oncology division chief, is chairman of the UMC clinical cancer committee. The approvals program was established by the ACS in 1956 to encourage developments in cancer therapy. University Hospital has had continuous approval since 1958.

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AAMA Sets 23rd Annual Convention

The American Association of Medical Assistants will hold its 23rd annual convention in New Orleans, Oct. 1-6, with Mississippi, Alabama and Louisiana as host states. "AAMA — River of Knowledge" is the convention theme.

Three general educational sessions will be open to all registrants. On the opening morning, a panel will discuss holistic health care. Thursday's general meeting will be devoted to the subjects of stress and the management of time. Friday's agenda will include a discussion of liabilities and how the medical assistant can help the physician avoid them, a look at new procedures in radiologic science, and an overview of the field of forensic medicine.

Educational workshops during the week will cover such topics as collections, pain management, physical fitness, economics, computerization of the medical business office, and business law.

Registration for members and their spouses is \$100 each; for non-members the fee is \$125 each. Mississippi medical assistants and their physician employers are invited to participate. For more information contact: Mrs. Gladys Lamb, Greenwood, convention co-chairman (telephone 453-0503); Mrs. Marion Cook, Tupelo, AAMA-Mississippi Society president (842-8736); Miss Carol Lockey, Jackson, vice-president (362-8663); or Mrs. Helen Donohoo, Gulfport, treasurer (864-2752).

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IN CONCLUSION

In 1978 more than 4,000 medical students and young physicians in training borrowed \$5.8 million to help meet their expenses through the AMA Education and Research Foundation Student Loan Guarantee Program. In addition, a total of \$1,336,383 in ERF funds was channeled directly to the nation's medical schools in grants distributed in March of this year. Some 94% of all borrowers whose loans have matured since 1969 have repaid or are repaying their obligations.

Next year the AMA will launch a new concept in medical meetings for doctors - the theme meeting. Targeted for the non-specialist, the programs will provide advanced, sophisticated information cutting across specialty lines. Much of the meeting time will be devoted to small group discussions and workshops. The first meeting, in Los Angeles, April 10-13, will center on coronary artery disease. The second meeting, in Kansas City, will explore clinical drug therapies.

Improved protective headgear has led to a decline in the number of head injuries and deaths among high school and college football players over the last two decades, but fractures and dislocations of the neck with resulting paralysis have increased. During the five-year period between 1959 and 1963, there were 56 neck fractures and dislocations; between 1971-1975, there were 259 such injuries. The number of resulting quadriplegics more than tripled.

Society can no longer be confident of the "wholesome influence" of family life on children. The incidence of school drop-out, drug abuse and juvenile delinquency in today's middle-income family resembles the low-income family of the early 1960s. A new guidebook, "The Physician and the Mental Health of the Child," is available now from AMA's Order Department, P. O. Box 821, Monroe, WI 53566. The book offers information on common problems and counsel on assessing solutions.

Charging that a "drug lag" in the U.S. has prevented Americans from receiving some lifesaving new medicines that have been available for years in other countries, the Pharmaceutical Manufacturers Association has offered Congress recommendations to help resolve the problem. Agreeing that the development of new drugs must be subject to strict safety and efficacy requirements, a spokesman called for more efficient and cost-effective approval methods to avoid unnecessary delays in drug approval.

For recurrent attacks of urinary tract infection in women

BactrimTM DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient b.i.d. dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
20	9	1 teasp. (5 ml)	½ tablet
40	18	2 teasp. (10 ml)	1 tablet
60	27	3 teasp. (15 ml)	1½ tablets
80	36	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment:

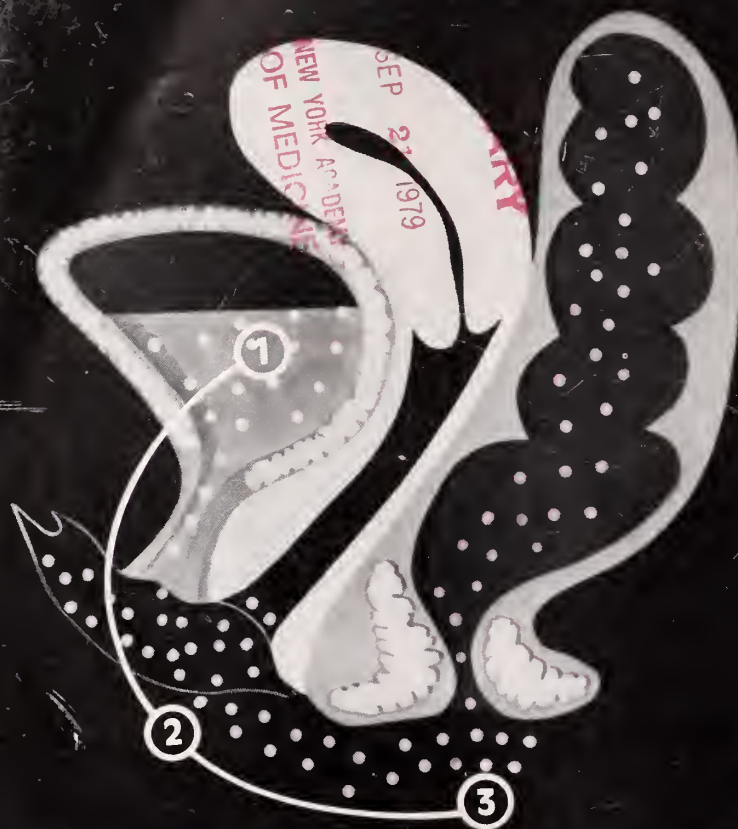
Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	½ the usual regimen
Below 15	Use not recommended

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose[®] packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose[®] packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has no significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

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October 1979

BALCONY

Journal of the
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(ISSN 0026-6396)

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Association of Thyroid
Dysfunction and
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malforma-

tions as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



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WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching, it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations,

prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

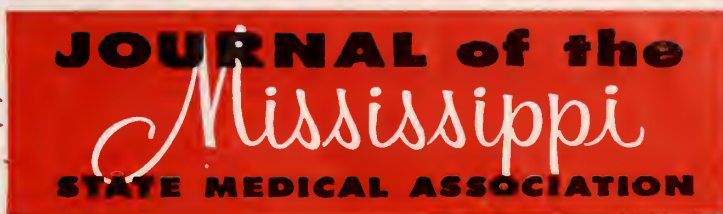


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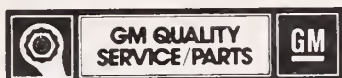
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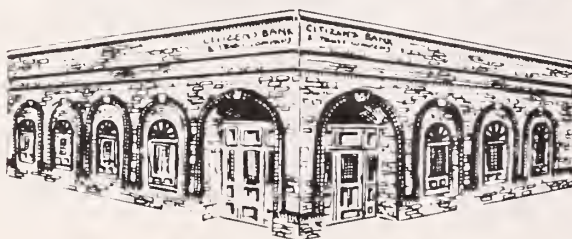
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Women Consider Doctors Primary Information Source

Most women still look first to their doctor for information about the medications he prescribes for them. Less than half of the women consider the printed patient package insert as an important source of information about their medicines.

These were the findings of a survey conducted by the University of Rochester School of Medicine and Dentistry, Rochester, NY, and reported in a recent issue of the *Journal of the American Medical Association*.

The study involved some 150 women who were receiving estrogens to suppress flow of breast milk following childbirth. They were asked questions to determine how much they knew about the benefits and risks of the estrogens and where they had learned this information.

Most patients in the survey (91.8%) considered their physicians to be "very important" information sources. Other health professionals were also considered very important by a majority of the respondents (nurses, 67.3%; pharmacists, 55.6%).

Less than half of the subjects (40%) considered the patient package insert to be very important. Less than 20% considered media (newspapers, magazines and television) to be very important sources.

Las Vegas Hosts SMA Scientific Assembly

Southern Medical Association's 73rd Annual Scientific Assembly will feature 24 postgraduate courses. Among the many topics for study are: basic and advanced life support, reconstructive hand surgery, practical outpatient surgery, recent advances in drug therapy, treating hypertension, management of the critical neonate, and updates on infectious diseases and antibiotics.

Sponsored jointly with the AMA, the meeting will be held at the MGM Grand Hotel in Las Vegas, Nov. 4-7, 1979.

For more information, write to Southern Medical Association, 2601 Highland Ave., Birmingham, AL 35205, or telephone (205) 323-4400.



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95% cure mean cure rate in clinical studies was 95% (range: 90%-100%) after treatment with one VERMOX tablet; in cases of reinfection, a second tablet is advised

* Because Vermox has not been extensively studied in children under two years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnancy (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

Vermox[®] chewable tablets (mebendazole)

TRADEMARK

Description VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

Actions VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival.

In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 µg/ml and 0.09 µg/ml, respectively.

Indications VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies in function of such factors as pre-existing

diarrhea and gastrointestinal transit time, degree of infection and helminth strains.

Contraindications VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

Precautions **PREGNANCY:** VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

Adverse reactions Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

Dosage and administration The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food.

For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.

For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.

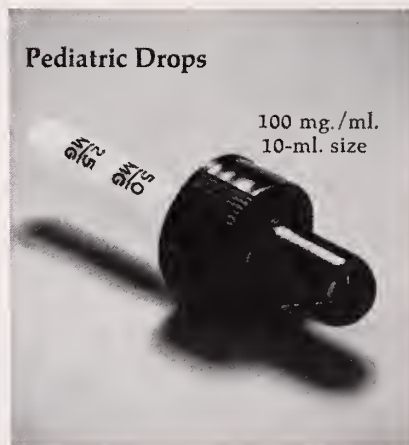
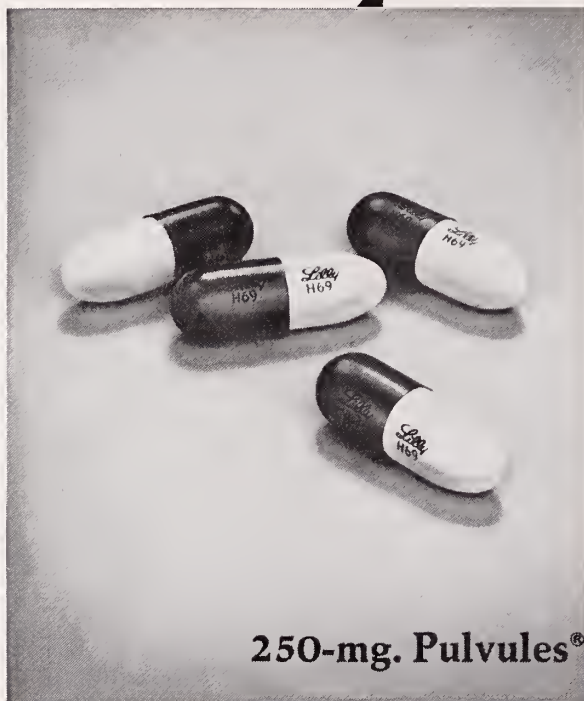
If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

How supplied VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.

VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.



easy to take



Keflex®
cephalexin



500738

Additional information available to the profession on request.
Eli Lilly and Company
Indianapolis, Indiana 46206

NEWSLETTER

October 1979

Dear Doctor:

"The penalty for wise men who refuse to become involved in the affairs of government is to live under the government of unwise men." Those words by Sir Edmund Burke remind us that it is imperative that citizens become involved in government and warn us of the consequences if we fail to do so. Dr. Gable, in his President's Page message this month, makes an appeal for membership in MPAC, an effective instrument for involvement in government.

"The physician who says he is not interested in politics is like a drowning man who says he isn't interested in water," remarked Dr. James W. Hays, president of the Tennessee Medical Association, recently. He was describing the urgency of medicine's role in government to ensure that this country maintains the world's finest medical system.

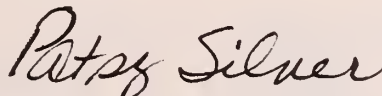
Sen. Edward Kennedy's "Health Care for All Americans Act" was officially introduced last month when Congress reconvened. As expected, major elements include federal administration and control through a National Health Board, wide use of private insurance under close federal regulation, negotiated fee schedules for physician reimbursement, increased Medicare coverage, and mandatory coverage of employees.

The Senate Veterans Affairs Committee has recommended passage of a bill to drop some free VA assistance (including dental care, drugs and medical supplies) for veterans whose disabilities are not service connected. "U.S. News and World Report" notes action was taken in view of expected rise in medical care costs for veterans. By 1985, some 12.6 million WW II veterans will be 65 or older, and eligible for health benefits.

Officials estimate that the demand for VA hospital facilities will jump by 11,000 beds in the next six years, and the number of vets needing nursing-home care will escalate to 272,000 in the year 2000. By 1995, the number of vets over 65 (who need five times as much health care) will triple the 1980 level, reaching a projected total of 8,043,000. Health care expenditures for vets now totals \$5.8 billion a year.

"PSROs should receive adequate funding to carry out their mission - insuring medical necessity, quality and appropriateness of health care services rendered to federal program beneficiaries," AMA told the House Ways and Means Subcommittee on Oversight and Investigations. AMA said consistent underfunding of program diminishes effectiveness of the review system and suggests lack of government commitment to PSRO law.

Sincerely,



Patsy Silver
Managing Editor

Cancer Detection Insurance Plan!

An Important New Membership Group Benefit

Provides A Single-Sum Benefit
Immediately Upon Detection of Cancer
Up to \$50,000 depending on the age
of the member whose cancer is diagnosed

Innovation in Insurance

"Innovation" is the watchword at Thomas Yates & Co. We believe in leaving the beaten path...in changing the way of doing things. Our aim is to steadily strengthen membership benefit programs through the introduction of new and improved coverages...to give buyers better protection for the money and to make insurance more convenient and adaptable...and to back up the plans we install with imaginative and thorough service.

This plan is simplicity itself. It pays a single-sum benefit immediately when cancer is diagnosed. The benefit is paid in addition to any other insurance and regardless of actual expenses incurred for treatment. This gives you absolute freedom in how to use the benefit.

They may sound like other plans - but there is a difference.

Write for a brochure or call 601/948-1732.



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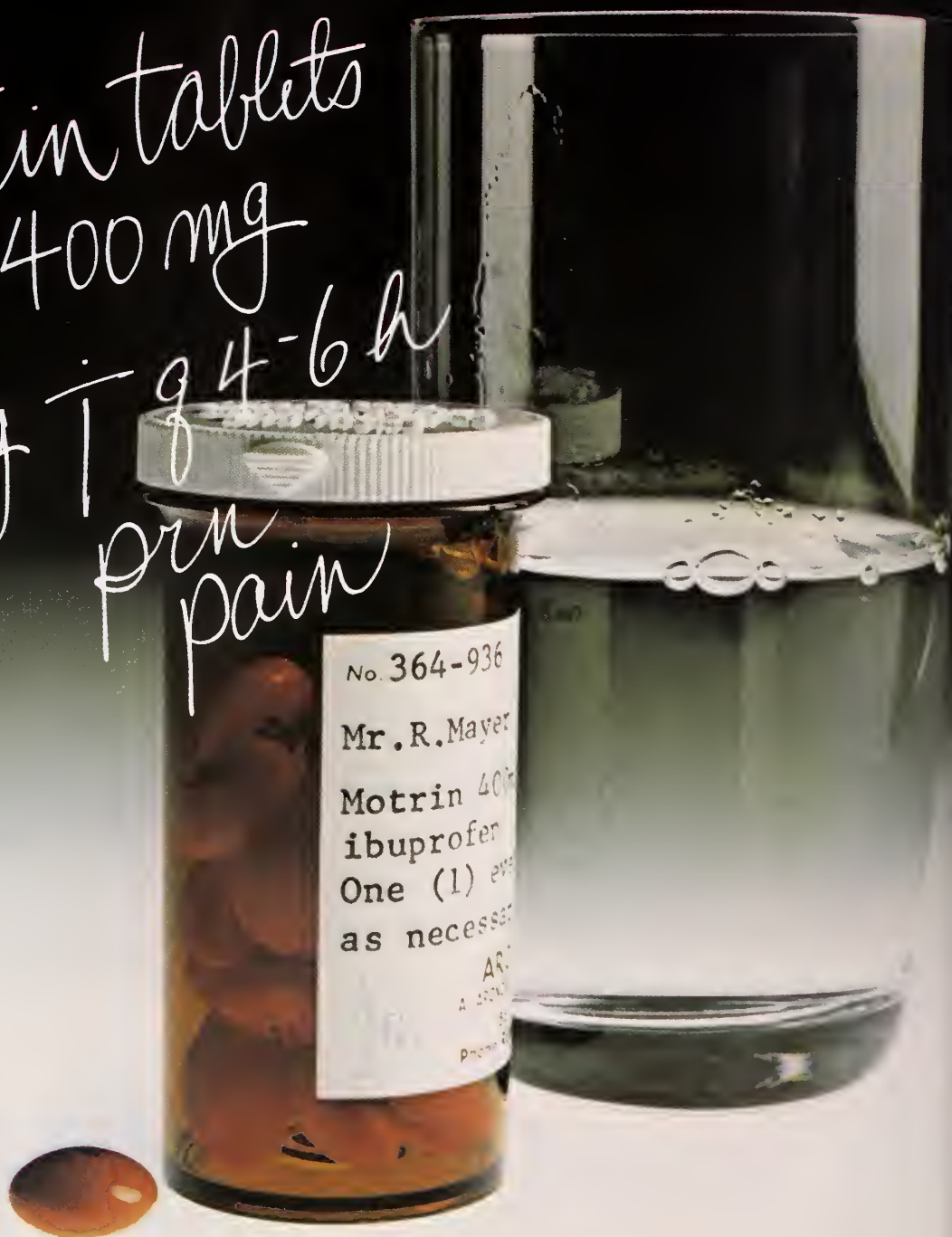
The Upjohn Company
announces
a new
indication for
Motrin[®]
(ibuprofen)



A well-tolerated, nonnarcotic prescription for pain

Motrin tablets
400 mg

Sig T q 4-6 h
prn
pain



Motrin now proved an effective analgesic for mild to moderate pain

Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

Time after drug administration (hour)		.5	1	2	3	4
Mean relief-of-pain scores* (No. patients reporting)	Motrin 400 mg ibuprofen	.89 (108)	1.25 (108)	1.36 (108)	1.28 (107)	1.19 (106)
	Darvon 65 mg propoxyphene	.66 (100)	.99 (99)	1.13 (96)	.99 (96)	.80 (96)
Statistical significance		p<0.02	p<0.01	p<0.05	p<0.02	p<0.002

*0 = No relief 1 = Partial relief 2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

Motrin 400^{TABLETS}mg
ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

Upjohn

Motrin[®] (ibuprofen)

now proved an effective analgesic for mild to moderate pain

Motrin[®] Tablets (ibuprofen, Upjohn)

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. Aspirin: used concomitantly may decrease Motrin blood levels.

Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

Upjohn

THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

MED B-4-S

ALDORIL[®]
containing methyldopa and hydrochlorothiazide

TABLETS

ALDORIL[®]-25

containing 250 mg ALDOMET[®] (Methyldopa, MSD)
and 25 mg HydroDIURIL[®] (Hydrochlorothiazide, MSD)

TABLETS

ALDORIL[®]-15

containing 250 mg ALDOMET[®] (Methyldopa, MSD)
and 15 mg HydroDIURIL[®] (Hydrochlorothiazide, MSD)

TABLETS

ALDORIL[®] D30

containing 500 mg ALDOMET[®] (Methyldopa, MSD)
and 30 mg HydroDIURIL[®] (Hydrochlorothiazide, MSD)

TABLETS

ALDORIL[®] D50

containing 500 mg ALDOMET[®] (Methyldopa, MSD)
and 50 mg HydroDIURIL[®] (Hydrochlorothiazide, MSD)

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Merck & Co., Inc., West Point, PA 19486

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Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

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Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

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Riverside.

Mississippi's Unique Psychiatric Hospital.

Riverside Hospital is unique in Mississippi.

As a privately owned 56-bed short term care facility for treating patients with psychiatric illness or emotional problems, it is the only hospital of its kind in the state.

Architecturally designed to create an attractive open environment, Riverside's "non-institutional" atmosphere helps prepare the patient for specific therapy, healthy entertainment and physical recreation.

The clinical program incorporates a wide range of modern psychiatric ideas. Emphasis is placed on interpersonal relationships, small group functions, and professional individualized care.

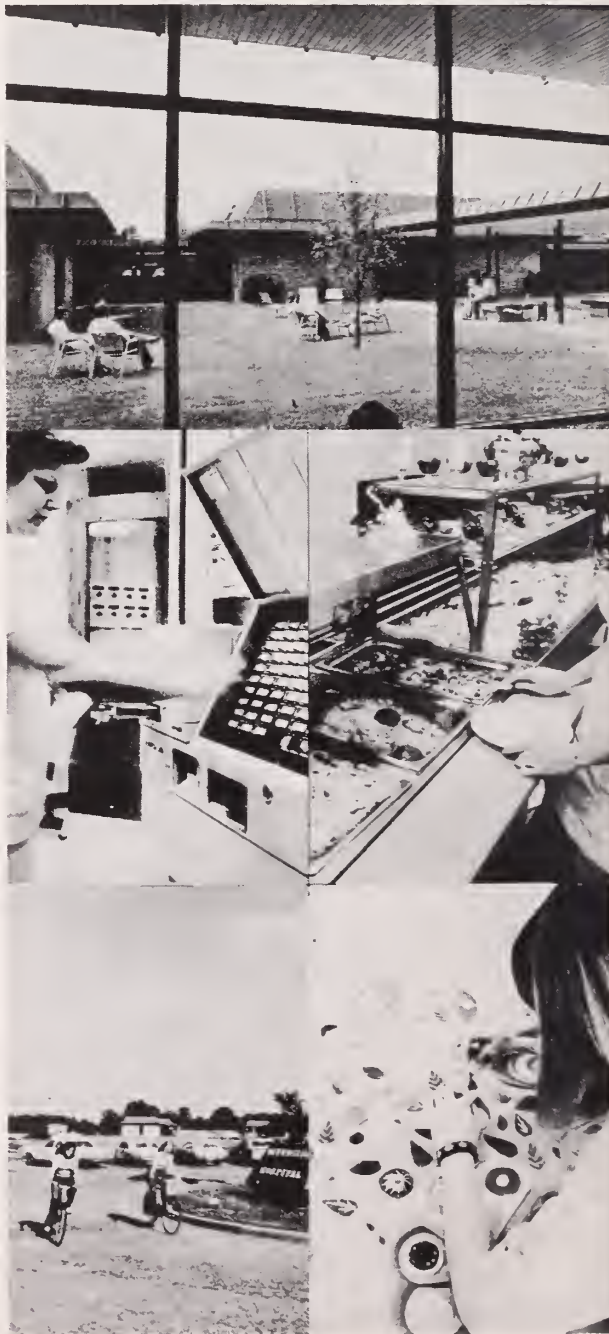
The Medical Staff includes a large number of physicians in private practice in the Jackson area. All are qualified and limit their practice to psychiatry.

Riverside is licensed by the Mississippi Commission on Hospital Care, and fully accredited by the Joint Commission on Accreditation of Hospitals.

For additional information contact: John R. Reedy, Executive Director.

Riverside Hospital

P.O. Box 4297, Jackson, MS 39216
Telephone: (601) 939-9030



DATELINE

Joint Practice Conference Held

Jackson, MS - The state's first Joint Practice Conference was held last month in Jackson, cosponsored by the Mississippi Nurses' Association and MSMA. Speakers included representatives of the National Joint Practice Commission and Hillcrest Hospital in Tulsa, OK, who discussed the development of the joint practice concept and the workings of the Tulsa Demonstration project. Mississippi nurses and physicians discussed collaborative practices presently at work in the state.

Societies Working For Cost Control

Chicago, IL - An AMA survey indicates that medical societies are active in cost containment programs. Of the societies responding to a questionnaire, 66% are active in the Voluntary Effort and 56% have organized a physician committee on cost containment. Ninety percent of state societies in the survey said their membership is aware of the AMA's interest in voluntarily managing the cost problem, and 45% said they have recently sponsored meetings on cost containment.

"BAD" Ideas Save Money

Houston, TX - "BAD" ideas from medical staff members and employees of a Texas hospital will save some \$30,000 in the year ahead. "BAD" stands for "Buck a Day," a Rosewood Hospital program calling for money saving ideas. Coffee mugs inscribed with "I'm a Rosewood BAD guy" were given for an initial idea, and BAD Bucks (play money that could be redeemed for a dessert in the hospital cafeteria) were given for additional ideas. State officials commended the program.

Report Problems Toll-Free

Rockville, MD - Health care professionals can dial a toll-free number (800-638-6725) to report problems they experienced with drugs, medical devices and in vitro diagnostic products. The FDA encourages the reporting of: hazardous or potentially hazardous products, product mislabeling; incomplete or confusing instructions; erroneous information; designs that encourage human error; performance failures; non-sterile products, packaging errors; defective components, etc.

Hospital Associations Sue HEW

Washington, DC - The American Hospital Association and the Federation of American Hospitals have joined more than a dozen other health organizations in filing a suit against the Department of HEW. The suit aims to bar HEW from shifting the costs of malpractice insurance premiums away from Medicare/Medicaid and on to private patients and their insurance companies. This will affect \$300 million in reimbursements in fiscal year 1980, and cause hospitals to raise rates, a spokesman said.

Many Children Burned By Child Abusers

A growing number of child abusers are burning or scalding the suffering youngster, says a report in a recent issue of the *Journal of the American Medical Association*.

At the Children's Hospital of Michigan in Detroit, doctors found that battered children had inflicted burns in 9.3% of 1,518 cases. Nonaccidental burns were recognized in 16% of children admitted to the burn center.

Says Donald W. Hight, M.D., of Wayne State University School of Medicine: "The high incidence of subsequent injuries, permanent morbidity, and rising mortality mean that all physicians must be aware and prepared to recognize this common social illness."

Seventy-five per cent of the children were from homes of single parents, Dr. Hight says. Among these parents many were young and socially isolated. The average age for inflicted burns was 32 months.

Up to 10 years ago, inflicted burns were thought to constitute only 1%-2% of children admitted to the burn center, he reports. Heightened awareness of the battered child syndrome has led to an increase in the number of recognized cases.

Doctors were advised to study the location of the burn in relation to the parent's explanation of how it happened to determine whether the injury might have been intentional. Doctors also were admonished to be cautious not to incriminate an innocent parent by jumping to unfounded conclusions. By critically assessing depth, extent and distribution of the burn, along with the developmental age of the victim, the physician can confirm or refute a suspicion of inflicted injury, Dr. Hight says.

Three Mile Island Residents Will be Studied

A 25-year study of Pennsylvania residents living near the Three Mile Island nuclear power plant is planned. The federally-assisted program will assess the physical and psychological consequences of the nuclear accident, at a projected cost of \$10 million.

The Department of HEW estimates that "as a result of the accident there will be one additional cancer death, one additional nonfatal cancer, and one additional birth defect among the 2 million people within 50 miles of the facility."

Tenuate®

(diethylpropion hydrochloride NF)

Tenuate Dospan®

(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence.** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychological dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdose. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals and in mid-evening if desired to overcome night hunger; Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdose include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenitoin (Regimine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdose.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.

Cayey, Puerto Rico 00633

Direct Medical Inquiries to

MERRELL-NATIONAL LABORATORIES

Division of Richardson-Merrell Inc.

Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request from Medical Research Department, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon (Dillon), R.H., and Leyland, H.M. A comprehensive review of diethylpropion hydrochloride. In, *Central Mechanisms of Anorectic Drugs*, S. Garattini and R. Samanin, Ed., New York, Raven Press, 1978, pp. 391-404.

Merrell

**Overweight may not always be simple...
complications can develop*.
Complicated or not...**

Tenuate[®] Dospan[®] ^{IV} **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.¹ And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."² Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.
And it's responsible medicine.**

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

Merrell

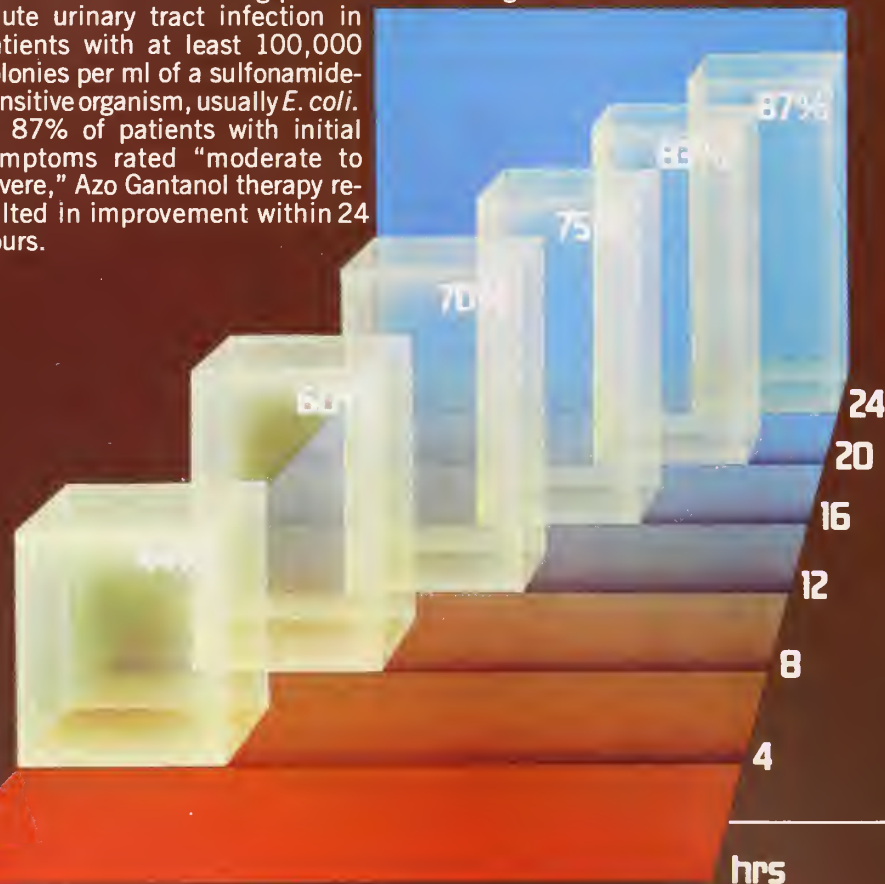


For prescribing information see opposite page

Important data on the pain of acute cystitis:

In 87% of patients studied (303 of 349), Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for
the pain

for
the pathogens

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

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Elimination of Measles Is Held Attainable Goal

The United States can eliminate measles by 1982, the Surgeon General of the United States declared in an editorial in the Sept. 14 *Journal of the American Medical Association*.

Dr. Julius B. Richmond's editorial accompanies a study of the effort to eliminate measles by the Center for Disease Control, Atlanta. Alan R. Hinman, M.D., and colleagues trace the efforts to halt measles in the past year and conclude that complete elimination in this country is feasible.

Levels of immunization already are quite high among American children and cases of measles have dropped sharply, Dr. Richmond points out. Of 46 states surveyed in the fall of 1978, he says, 29 reported that 90% or more of children entering school for the first time had received measles vaccine. In 16 of these states the level was 95%.

Measles has been declining for 15 years, since the advent of the vaccine, and the public has tended to forget that the disease, while mild for most, still can cause complications leading to encephalitis, mental retardation, and even death, the Surgeon General points out.

In 1978 there were 26,795 cases of measles reported, a decline of 53% from the previous year. Three states, New Mexico, South Dakota and Wyoming, were free of reported measles throughout the year. In the first 26 weeks of 1979 only 10,686 cases were reported, an all-time low.

AMA Disapproves of Federal Funds for Lobbying

A bill that would prohibit use of federal funds for lobbying state and local legislatures was supported by the AMA in a letter to the Senate Subcommittee on Federal Spending Practices and Open Government.

The AMA urged the subcommittee to work for passage of the bill (S 691) in the Committee on Governmental Affairs and on the Senate floor. The bill would, "at the very least, remind the heads of our federal agencies that the American people expect their tax dollars to be spent on substantive programs, not on agency image building and massive lobbying efforts," the association said.

The letter further stated, "It could also prevent the recurrence of the too familiar scenario wherein a concerted federal lobby effort overwhelms state and local leaders' efforts to be effective in their own governance."

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must What you ~~should~~ know about the new Mississippi Drug Substitution law

As of July 1, 1979, the state legislature has dramatically changed the lawful way of prescribing drugs and of writing a prescription. Until now, writing the brand name of a drug on the prescription was enough to ensure that the

brand-name drug would indeed be dispensed. Now that no longer suffices. Unless the physician takes the necessary extra steps, for many drugs the pharmacist may substitute an "equivalent" generic drug where available.

Key points for the physician in writing prescriptions

- "Every prescription within this state ...shall be on prescription forms containing two (2) lines for the prescriber's signature."
- "In the event a prescription form which does not contain the two (2) signature lines...is utilized by the prescriber, he shall write in his own handwriting the words 'dispense as written' thereupon to prevent product selection."

Rx

dispense as written

substitution permissible

The decisions the physician must make

The physician should become acquainted with the newly mandated prescription form illustrated on the preceding page. This form requires a distinct change in the way prescriptions are written.

There are now *two* lines for the prescriber's signature. The prescription may be filled generically unless the physician signs on the line stating

"dispense as written." Special note should be made of the position of this line in the lower *left* of the prescription form rather than on the right, where the physician has customarily signed prescriptions. Only by signing on the left side can the physician be assured that the brand-name drug will be dispensed.

If the physician elects to permit substitution, this must be indicated by signing on the line marked "substitution permissible." This line is in the lower right hand corner of the prescription form.

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ORIGINAL PAPERS

Hemobilia From Ruptured Intrahepatic Artery Aneurysm in a Patient With Juvenile Rheumatoid Arthritis

TOMMY L. FUDGE, M.D., ROBERT C. LYNCH, M.D., and JOHN L. OCHSNER, M.D.

New Orleans, Louisiana

PRIMARY ANEURYSM rarely occurs in the intrahepatic portion of the hepatic artery. The following patient with inactive juvenile rheumatoid arthritis (Still's disease) had gastrointestinal bleeding found to be hemobilia from a ruptured intrahepatic artery aneurysm. The condition was diagnosed preoperatively and treated by hepatic resection.

Case Report

A 37-year-old white man with inactive juvenile rheumatoid arthritis and resultant multiple joint deformities had a four-day history of sharp epigastric pain that had first occurred shortly after taking an aspirin-containing analgesic. The pain later became a dull ache associated with mild cramping discomfort in the upper abdomen. He vomited one time on the first day of the pain. There was no evidence of blood in the vomitus. His stools remained normal in color. He was admitted to the hospital for evaluation.

His abdomen was mildly tender in the right upper quadrant and epigastrium, but no rebound tenderness or significant guarding was present. Bowel sounds were audible and were considered normal in quality and quantity. On admission, the hematocrit was 34.9%; hemoglobin, 11.4 gm/100 ml; erythrocyte sedimentation rate, 63 mm/hr (Westergren); there were 5600 white blood cells with a normal differen-

tial; the bilirubin was 4.2 mg/100 ml; serum amylase, 52 units/100 ml; alkaline phosphatase, 325 units/100 ml; SGOT, 275 Karmen units; sulfo-bromophthalein, 36%; total protein, 9.0 gm/100 ml. Nasogastric aspirate was positive for blood; however, no gross blood was seen and the bleeding was thought to be due to trauma caused by insertion of the drainage tube.

The patient's condition deteriorated over the next 24 hours, with increased pain, abdominal tenderness, and rebound in the right upper quadrant. Bowel sounds were now absent, and the patient's temperature rose to 101° F (38° C).

On the third hospital day, abdominal exploration was deemed necessary with a preoperative diagnosis of acute cholecystitis with probable common duct stone. An inflamed, tightly distended gallbladder was seen at operation. After removal, the specimen was opened to reveal a viscous dark substance actually forming a cast of the specimen. No gallstones could be identified. An operative cholangiogram revealed a normal ductal system. No blood was seen to reflux from the cystic duct. A needle biopsy of the liver was performed. Abdominal exploration was otherwise normal. Postoperatively, the report of liver biopsy was returned with the diagnosis of biliary cholestasis.

One week postoperatively, the patient became jaundiced with pale conjunctivae, although he insisted that he felt well and was ready for discharge.

From the Department of Surgery, Ochsner Medical Institutions, New Orleans, LA.

HEMOBILIA / Fudge et al

The bilirubin level had decreased after operation; however, it now rose to 5.8 mg/100 ml. The alkaline phosphatase was elevated (1100 mg/100 ml); the hematocrit had decreased to 29.5%; the hemoglobin, 9.6 gm/100 ml. Although the patient reported his stool as being normal in color, the stool guaiac was positive for occult blood.

Two days later, he experienced another episode of right upper quadrant pain and tenderness. Nasogastric aspirate was positive for blood and the diagnosis of hemobilia was strongly suspected, although no blood had been vomited or grossly identified in the nasogastric aspirate.

Proctoscopy and esophagogastroduodenoscopy with visualization of the ampulla of Vater were negative. Angiography revealed a small aneurysm in a branch of the left hepatic artery, but no active bleeding could be identified. On the day following angiography, pain became more acute and angiography was repeated (see Figures 1 and 2).



Figure 1. Note pseudoaneurysm of branch of left hepatic artery.

Over the next few hospital days, the patient was prepared for re-exploration. At operation a large hematoma was evident in the liver, in the medial segment of the left lobe, and a left hepatic resection was indicated. The hematoma was approximately 12 cm in diameter and had dissected into the medial segment of the right lobe and the lateral segment of the left lobe. Subintimal dissection of the hepatic artery had occurred at arteriography; it was corrected at operation by open hepatic artery endarterectomy and arteriorrhaphy. The patient tolerated the procedure well. The postoperative course was compli-



Figure 2. Note retained dye in pseudoaneurysm.

cated by a bile fistula presumably from the resected edge of the liver. The fistula closed spontaneously before discharge one month after surgery.

Two years after surgery, the patient's liver function has recovered completely; scan reveals a liver of normal size.

Discussion

Approximately 10%-12% of the reported 275 cases of hepatic artery aneurysms are intrahepatic.¹ The remainder are extrahepatic or combined intra- and extrahepatic. Various inflammatory conditions of the biliary system, penetrating trauma, bacterial endocarditis, and polyarteritis nodosa have been suggested as being the precipitating etiologic factors in aneurysm formation.² Regardless of cause, prognosis is poor for these patients unless they are treated surgically.³

With rupture of an aneurysm of the hepatic artery into the biliary system, hemobilia will become manifest usually with the triad of gastrointestinal bleeding, jaundice, and abdominal pain; however, the "classical triad" will not always be present. The symptom of bleeding will vary in presentation more than the other two aspects of the syndrome, appear-

ing as either upper gastrointestinal, lower gastrointestinal, or both. It may be constant or intermittent, insignificant or massive. Jaundice is dependent upon blockage of the bile ducts by clot. Biliary colic is thought to be due to passage of blood clots through the biliary tract through the ampulla of Vater and into the intestines.

Diagnosis is made by including hemobilia in the differential diagnosis after ruling out more common causes of gastrointestinal bleeding or jaundice. Duodenoscopy may not reveal blood coming through the ampulla because the duct is usually obstructed with clot. Arteriography is presently the most precise method of diagnosis of hepatic artery aneurysm, although active bleeding or extravasation may not be visualized. Without angiography, the diagnosis may not be made until laparotomy and choledochotomy. Definitive treatment will certainly present a problem unless the specific bleeding point can be localized. We suggest an intraoperative arteriogram to aid in the location of the site of bleeding if diagnosis is made by choledochotomy.

Operative treatment varies according to the location of the hepatic artery aneurysm. If extrahepatic, resection and primary repair or repair with vein graft is best. If the aneurysm is intrahepatic, the surgeon has two operative procedures available to him: either selective arterial ligation³ or hepatic resection.^{4, 5} Hepatic resection now has a relatively low mortality rate in experienced hands.

We feel that this case is particularly interesting because of the possible cause of the aneurysm. It is known that vasculitis may affect the vasa recta and arterioles in essentially all disorders associated with systemic vasculitis, including lupus erythematosus,⁶ dermatomyositis, polyarteritis nodosa, Henock-Schonlein purpura, and rheumatoid vasculitis.⁷ Involvement of major arteries by vasculitis may lead to

the formation of aneurysms which may rupture and produce gastrointestinal or intra-abdominal hemorrhage.⁸ We believe that in this case, the intrahepatic aneurysm was secondary to a previous vasculitis in this patient with rheumatoid arthritis. Rupture subsequently led to hemorrhage into the intrahepatic biliary radicals and therefore presented as hemobilia.

Summary

In summary, intrahepatic artery aneurysm accounts for about 10%-12% of hepatic artery aneurysms reported. The aneurysm is usually secondary to biliary tract infection, mycotic infection, trauma, or more rarely, to vasculitis. We believe this to be the only reported case of a ruptured intrahepatic aneurysm presenting with hemobilia associated with juvenile rheumatoid arthritis (Still's disease). ★★

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Association of Thyroid Dysfunction and Anemia

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THE ASSOCIATION OF ANEMIA with hyperthyroidism and hypothyroidism has been well documented.^{1,3} We report two cases of severe anemia; one patient (Case 1) was hyperthyroid, and the other patient (Case 2) was hypothyroid. All hematological parameters returned to normal after each patient became euthyroid.

Case 1

A 17-year-old white boy was well until two months prior to admission, when he noted palpitations and tachycardia. Over the subsequent two months he experienced tremulousness, easy fatigability, insomnia, 4.5 kg weight loss with an increase in appetite and heat intolerance. He was taking no medications. He revealed a family history of thyroid disease in his grandmother, two aunts and an uncle. All relatives had a history compatible with adenomatous goiter.

Physical examination revealed a thin, tremulous male with a regular pulse of 130 per minute and a blood pressure of 140/90 mm/Hg. The skin was soft and velvety. Bilateral lid retraction was noted and minimal supraorbital edema was evident. The thyroid was estimated to weigh 50 g and was soft in consistency.

A 24-hour I¹³¹ uptake was 59%. The thyroxine level by radioimmunoassay was 14.9 $\mu\text{g/dl}$ (normal: 5.0-12.0 $\mu\text{g/dl}$). He had a hypochromic microcytic anemia with a hemoglobin level of 8.0 g/dl and a hematocrit of 26%. The mean corpuscular volume (MCV) was 57 μ^3 , the mean corpuscular hemoglobin (MCH) was 18.4 μg and the mean corpuscular hemoglobin concentration (MCHC) was 31.4%. The peripheral smear revealed microcytic red blood cells

with significant pallor. The hemoglobin electrophoresis demonstrated a hemoglobin migrating in the mobility range of AA.

He was treated with 10 millicuries of radioactive iodine and at his scheduled return visit two months later, the symptoms of hyperthyroidism had abated and he was euthyroid clinically. A free thyroxine index was 0.93 (normal: 0.86-1.07). The 6-hour radioactive iodine uptake was 2%. His hemoglobin level had increased to 9.1 g/dl.

At his last visit, the hemoglobin level was normal at 15.3 g/dl (see Table I).

Case 2

An 18-year-old woman, complaining of easy fatigability and dry skin, was referred by her family physician. On systematic interrogation, she admitted to a long history of cold intolerance, but denied muscle cramps, change in bowel habits, galactorrhea, or menstrual irregularities. There was no family history of thyroid disease. She was taking no medications.

Physical examination revealed a soft-spoken woman with a puffy, pale, expressionless face and extremely dry skin. No goiter was palpable. Delayed relaxation phase of the deep tendon reflexes was evident.

Laboratory evaluation revealed a thyroxine by radioimmunoassay of less than 0.5 $\mu\text{g/dl}$. The thyroid stimulating hormone by radioimmunoassay was 942 $\mu\text{g/ml}$ (normal: 2.0-6.0 $\mu\text{g/ml}$). She had a normocytic normochromic anemia with a hemoglobin of 9.7 g/dl, an MCV of 95 μ^3 , an MCH of 31.7 μg , and a MCHC of 33.4%. The bone marrow biopsy specimen showed a normocellular marrow. The reticulocyte count was 1.1%. The serum iron was 39 $\mu\text{g/dl}$ (normal: 50-150 $\mu\text{g/dl}$), and the iron binding capacity was 256 $\mu\text{g/dl}$ (normal: 300-450 $\mu\text{g/dl}$). The serum vitamin B₁₂ level was 880 pg/ml (normal: 170-700 pg/ml).

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Upon her scheduled return in two months, she felt well and was euthyroid clinically; she was taking 0.15 mg L-thyroxine. Her free thyroxine index was 0.93 (normal: 0.86-1.07). The hemoglobin level had increased to 11.9 g/dl.

At her last visit, her hemoglobin level was normal at 13.1 g/dl (see Table II).

Discussion

Patients with hyperthyroidism usually have a normal hemoglobin level with normochromic and normocytic red cells. However, a small number of patients have an anemia for which no other cause can be found. This anemia is corrected with antithyroid therapy alone.

There is much evidence to support the fact that thyroid hormone enhances the function of the hematopoietic system. It increases red cell mass in man, and it produces active erythropoiesis in the bone marrow, as indicated by rapid plasma iron clearance, increased plasma iron turnover and accelerated peak intolerance of ^{59}Fe into red cells.³ Thyroid hormone also induces a hypercellular marrow with extension of the marrow organ, as indicated by the increased red marrow in long bones,⁵ and it has been reported to enhance the *in vitro* incorporation of radioactive amino acids into alpha and beta chains of hemoglobin.⁶

However, some investigators have demonstrated that hyperthyroid patients have greater retention and utilization of vitamin B₁₂ than normal,⁷ a shortened⁸ or normal⁹ erythrocyte survival, impairment in the

utilization of iron to form erythrocytes,² and pyridoxine deficiency.¹⁰ All may play an etiological role in the development of normochromic and normocytic anemia.

There is an increased incidence of pernicious anemia in patients who have been treated for hyperthyroidism. A review of the literature in 1945 revealed 76 cases of coexistent hyperthyroidism and pernicious anemia.¹¹

The decreased MCV and MCH in the patient with hyperthyroidism returned to normal with correction of the hyperthyroidism alone. Nightingale et al¹ reported the results of their study which also showed that MCV was decreased in a significant percentage of patients and returned to normal with antithyroid treatment. These authors stated that the MCHC will be normal, as in our case, except in the presence of iron deficiency.

Anemia may occur in all forms of hypothyroidism, and when present, it may have various causes. It may be a consequence of the hypothyroidism alone and then may respond to treatment with thyroid alone. However, coexisting pernicious anemia, folate deficiency, iron deficiency, or a combination of these may play an etiological role in the anemia.

Das et al³ demonstrated a decrease in both the red cell mass and the plasma volume. Due to the concomitant reduction in plasma volume, the presence of anemia in many of these patients is not evident from hemoglobin and hematocrit values. The ferrokinetic data, such as decreased plasma iron clearance rate, delayed peak utilization of ^{59}Fe by red

TABLE I
SUMMARY OF LABORATORY FINDINGS IN CASE 1

	12/20/77	2/20/78	2/24/79
RBC $\times 10^6/\text{c.mm.}$	4.49	5.15	5.68
Hgb $\mu\text{g/dl}$	8.0	9.1	15.3
Hct%	26.0	28.0	45.9
MCV μ^3	57.0	54.0	80.8
MCH $\mu\mu\text{g}$	18.4	17.9	27.0
MCHC $\mu\text{g/dl}$	31.4	32.4	33.4
WBC $\times 10^3$	4.7	6.2	5.3
Retic%			0.4%
Iron $\mu\text{g/dl}$			33.0
Total iron binding capacity			396.0
Platelet			183,000
FTI (0.86-1.07)		0.93	
T-4 $\mu\text{g/dl}$	14.9		
TSH $\mu\text{g/ml}$			
Uptake I^{131}	59% (24 hr)		2% (hr)
Vitamin B ₁₂ pg/ml			

TABLE II
SUMMARY OF LABORATORY FINDINGS IN CASE 2

	7/24/78	11/9/78	2/15/79
RBC $\times 10^6/\text{c.mm.}$	3.15	4.15	4.53
Hgb $\mu\text{g/dl}$	9.7	11.9	13.1
Hct%	29.8	35.7	39.0
MCV μ^3	95.0	86.0	85.9
MCH $\mu\mu\text{g}$	31.7	28.6	29.0
MCHC $\mu\text{g/dl}$	33.4	33.2	33.8
WBC $\times 10^3$	7.7	8.6	10.2
Retic%	1.1%		
Iron $\mu\text{g/dl}$	39.0		46.0
Total iron binding capacity	256.0		340.0
Platelet	342,000		412,000
FTI (0.86-1.07)		0.93	
T-4 $\mu\text{g/dl}$	Less than 0.5		
TSH $\mu\text{g/ml}$	942.0		
Uptake I^{131}			
Vitamin B ₁₂ pg/ml			880.0

THYROID DYSFUNCTION / Grenfell

cells, and reduced proliferative activity of marrow erythroblasts,³ lend strong support to the conclusion that a quantitative reduction of erythropoiesis, and not ineffective erythropoiesis nor decreased red cell life span,⁹ lead to the diminished red cell mass. In some patients, the peripheral blood film shows small numbers of irregularly contracted red cells. It should be noted that this normochromic anemia of myxedematous patients responds slowly to thyroid treatment; for some patients, hemoglobin values are not in the normal range for almost a year.

Iron deficiency anemia is not uncommon and probably results from a variety of factors including menorrhagia, poor appetite, and a high incidence of histamine fast achlorhydria.¹⁴

Severe macrocytic anemia may be due to folate or Vitamin B₁₂ deficiency. Tudhope and Wilson¹⁵ have stated that if macrocytic indices or severe anemia are present, some cause in addition to the hypothyroidism can usually be detected.

These two cases demonstrate the fact that severe anemia may be the presenting symptom of thyroid dysfunction and that the anemia may be due to the hypothyroidism or hyperthyroidism alone. ★★★

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Radiologic Seminar CXCv: Pulmonary Lymphangiectasia: An Uncommon Cause of Respiratory Distress in the Newborn

PRENTISS L. SMITH, M.D.

Brookhaven, Mississippi

PULMONARY LYMPHANGIECTASIA in the newborn is an uncommon and generally fatal cause of respiratory distress. The clinical picture of a rapid and progressive downhill course in an infant with respiratory distress (unresponsive to appropriate clinical measures) and the radiographic findings described below should give the clinician and radiologist a high index of suspicion that he is dealing with this uncommon disease.

Case Report

This is a case of a full term Caucasian baby boy, who was delivered by caesarean section from a 23-year-old mother (gravida 2, para 0, ab 1), whose pregnancy was unremarkable with the exception of mild preeclampsia during late pregnancy. At birth the infant appeared normal with no evidence of respiratory distress. Approximately six hours following birth the infant began to show clinical signs of mild respiratory distress with blood gases demonstrating mild hypoxemia and acidosis. Portable chest x-rays obtained at that time (see Figures 1 and 2) revealed a normal heart with over-aerated lung fields, a coarse reticulonodular interstitial pattern and Kerley 'B' lines at the costophrenic angles. The patient was given 40% oxygen by mask. Appropriate laboratory studies were obtained. Approximately 12 hours following birth the infant's condition had worsened, and he exhibited signs of severe respiratory distress. A portable chest film obtained at that time appeared unchanged as compared with the initial study. Blood gases obtained at this time demonstrated worsening of the patient's hypoxemia. The patient was intubated and placed on the baby bird respirator with

incremental increases of PEEP up to 20cm H₂O with 100% oxygen. He was treated intravenously with antibiotics, steroids and salt poor albumin. However, the infant's hypoxemia and clinical course continued to worsen. A third portable chest film again appeared essentially unchanged (see Figure 3). The child's clinical condition continued to deteriorate, and at approximately 16 hours following birth, he expired. An autopsy revealed a diagnosis of congenital pulmonary cystic lymphangiectasis with no cardiac or pulmonary vein anomalies noted.



Figure 1

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From the Radiology Department of King's Daughters Hospital,
Brookhaven, MS.



Figure 2



Figure 3

Pathogenesis

Mild forms of pulmonary lymphangiectasia are unimportant clinically and are not recognized until later in childhood or adulthood. The severe form of pulmonary lymphangiectasia is incompatible with life, and it is a cause for severe respiratory distress in newborn infants.

There are two general categories of pulmonary lymphangiectasia. In the first group, which comprises approximately one-third of all cases, there is an associated cardiac anomaly. This appears to be associated with obstructed pulmonary venous return, with hemodynamic factors keeping the pulmonary lymphatics dilated and thus playing the major role in the pathogenesis of the lymphangiectasia. In the second group of patients, which comprises approximately two-thirds of the cases, the pathogenesis of the pulmonary lymphangiectasia is felt to result from abnormal development of the lung lymphatic system, occurring probably between the 14th and 20th weeks of gestation. During this phase the pulmonary lymphatics are large in relation to the remainder of the lung, whereas by the 18th and 20th weeks of intrauterine life, the lung's connective tissue elements normally diminish and the lymphatics become much narrower. It has been postulated that congenital lymphangiectasia represents a failure of the lymphatics to undergo regression while the lung parenchyma continues to grow. This form of the disease is generally considered invariably fatal at an early age, usually within the first 24 to 48 hours of birth. Pulmonary lymphangiectasia can be associated with generalized lymphangiectasia of other organs.

Pathology

Grossly the pulmonary parenchyma is coarsely nodular and resembles a cirrhotic liver. The nodular appearance results from abnormal prominence of the interlobular septa because of dilatation of the septal lymphatics. Close gross examination reveals, within the septa, ovoid or spherical spaces that are filled with clear fluid. This differentiates lymphangiectasia from interstitial emphysema, with which it may be confused but in which the interstitial vesicles contain air, not fluid. Serial sections of the lungs reveal that these fluid-filled spaces are lined with endothelium and intercommunicate with septal and subpleural lymphatics. The respiratory embarrassment occurring in this condition is thought to result from abnormal rigidity which the distended lymphatics impart to the pulmonary tissue.

Clinical Findings

In the first few minutes of life the infant with severe pulmonary lymphangiectasia may breathe normally, but soon symptoms of respiratory distress and cyanosis are noted. These symptoms progress, and the infant usually succumbs within 30 minutes to 30 days of birth. This condition has been reported to occur twice as often in males as in females and usually after full term birth. The disorder is not known to be familial.

Radiographic Features

The roentgenographic appearance of this disease is variable. In severe pulmonary lymphangiectasia the chest radiographs generally show large, punctate, miliary-like lesions distributed throughout the lungs and in addition, reticular areas of increased density which represent dilated lymphatics. Typically Kerley 'B' lines are identified at the costophrenic angles. There is usually over-aeration of the lung fields and a normal sized heart. This disease process can generally be differentiated radiographically from the more common causes of respiratory distress in newborns such as hyaline membrane disease by the lack of the "ground glass" appearance of the lungs and the presence of over-aeration of the lung fields. Differentiation from transient tachypnea of the newborn may be made by the lack of cardiomegaly and the reticulonodular pulmonary inter-

stitial pattern being present rather than engorged pulmonary vasculature. Pulmonary lymphangiectasia does closely resemble aspiration syndrome and infectious pneumonitis in the newborn by its over-aerated lung fields, normal sized heart, and the interstitial pattern resembling the peribronchial infiltrates and obstructive interstitial emphysema seen in these two disease processes. However, Kerley 'B' lines are not seen in aspiration syndrome or infectious pneumonitis, and this helps to differentiate these two diseases from pulmonary lymphangiectasia. Although the previously mentioned radiographic findings may be helpful in suggesting the presence of pulmonary lymphangiectasia, the diagnosis is generally established morphologically at necropsy.

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"We have created the best medical schools and trained the best physicians in the world. Our medical accomplishments are unsurpassed, both in the research of our scientists and the clinical excellence of our doctors. This growth of medical knowledge is unparalleled in the history of mankind, and we take well-deserved pride in these achievements."

—SENATOR EDWARD M. KENNEDY

Development of National Health Insurance in Canada: Its Effect on Physicians in Ontario

WILLIAM C. NICHOLAS, M.D.

Jackson, Mississippi

"DOCTORS IN EXILE" is the title of a feature article in a recent Canadian newspaper. The article described eight Canadian physicians, now residents of Texas, who had no regrets about their move from Canada to the United States. A great number of physicians (approximately 800 in 1978) have left Canada to practice in the United States, especially in the Deep South. This is no small number considering that the yearly output of physicians in Canada is 1,782 and in the province of Ontario it is 612.

Development of National Health Insurance in Canada: How It Is Affecting Physicians in Ontario

Since arriving in Mississippi, I have become aware that many physicians do not understand the impact of a National Health Insurance program on the lives of physicians. The object of this article is to give some insight into what has taken place in Canadian medicine over the past few decades, and the major role of the National Health Insurance Plan (NHI) in molding not only health care but also the lives of the physicians who are intimately involved.

Background

Canada is a large country with ten provinces, two territories and governments at both the provincial and federal level. The present health care system is supported entirely from provincial and federal taxes. The major guidelines are established by the federal government, but the administration is undertaken by the provinces. Benefits include all hospital and physician services, but do not include drugs, dental care and, in most cases, nursing home care.

Although private hospitals exist, they mainly represent various religious denominations, and for the most part are supported and funded by the government. Although fee for service is the method used by most provinces for reimbursing physicians, some

provinces give physicians the opportunity to negotiate alternate ways of reimbursement.

Health insurance programs in Canada go back to the First World War. At that time the province of Saskatchewan allowed municipal governments to levy taxes to pay for medical care. The provincial government soon began to assist the municipalities but ran into difficulty at the time of the Great Depression. This did not, however, prevent the federal government from attempting to enact in 1935 a National Health Care Program, which was later declared unconstitutional. The constitutional argument centered around the question of whether health care was the responsibility of the provincial or federal government. This question was settled at a later date, when the federal government was allowed to initiate a national program in cooperation with the provinces, who were to be responsible for its implementation.

Canada began to seriously look at national health care during the Second World War. The liberal government at that time was no doubt greatly influenced by activities in Great Britain, especially the Beveridge report which emphasized a comprehensive Social Security Program of which comprehensive health care was to be the major thrust. The government commissioned studies, completed in 1946, which put forth the general principle of a comprehensive health care program for all Canadian citizens. For economic and political reasons the government saw fit to introduce this program in stages, first offering health grants to the provinces for the training of professional staff and the building of facilities. These activities paved the way for the federal government to enact in 1956 the Hospital Insurance and Diagnostic Services Act, which covered all inpatient hospital expenses excluding those of the physician.

The federal government had a precedent for this undertaking. Some provinces, which were more socially oriented and tired of waiting for federal in-

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volvement in the health care field, organized their own hospital insurance programs. The first was the Province of Saskatchewan, which initiated its own publicly financed hospital insurance program in 1947.

The medical profession was not too concerned about government's involvement in hospital insurance, since it virtually wiped out the major concern of hospitalized patients — their ability to pay. As with hospital insurance, the first province to undertake a publicly sponsored medical insurance program was the Province of Saskatchewan, which introduced in 1962 a publicly financed medical care program for all its citizens. This was vehemently opposed by the Canadian and Provincial Medical Associations primarily because it was compulsory, and it required physicians to submit their bills to the government rather than dealing directly with the patient. Physicians upset with these conditions organized the first strike by physicians in Canadian history;² for three weeks physicians covered only emergency situations. With the help of a negotiator, a compromise was reached whereby physicians could deal directly with their patients, but the overall medical plan remained compulsory, publicly financed and run by government authority.

At about this time the federal government established a royal commission to assess health care needs in Canada.³ After two years of investigation, the report concluded that all Canadians had a right to health care, and that this was best achieved through government involvement rather than the free enterprise system. In spite of marked opposition by the medical profession, the government enacted the Medical Care Act in 1966. The funding of this program was to be shared approximately equally by the provinces and the federal government. Four principles were to be maintained at all times. The National Health Care Plan was to be *comprehensive* in its coverage, *universal* in its implementation, *funded from public sources* and *administered by government*.

This program was supported by the vast majority of the citizens. Over 90% of the members in the House of Commons voted in favor of the program. Why was there such overwhelming support? Philosophically, Canadians have always allowed their governments to do more in the social sphere than many other countries. Government has been intimately involved in major enterprises such as a national railway, a national airline, a national broadcasting company, and most recently a national petroleum company.

This, along with the fact that the economic climate

was quite favorable in the 1960's, and that many Canadian citizens had come to believe that health care was a right — not a privilege, prompted the government to adhere to its political promise and institute a National Health Insurance Plan. It did this at a time when every province had some form of private health insurance, some of them sponsored by provincial medical associations. The medical coverage in some provinces exceeded 90% of the population. The overall coverage for all of Canada was in the vicinity of 75% at the inception of the health care program, indicating that the government was committed to a comprehensive health care program even though the majority of its citizens were appropriately covered.

Who Pays and How Much

In the province of Ontario, which has a population of approximately nine million, the present total budget for health care is in the vicinity of four billion dollars.⁴ This money comes from three sources. Taking 1975 as a reference year, the federal government contributed approximately 40% of the cost of the plan. The provincial government contributed approximately 40%; the remaining 20% was raised by a provincially sponsored plan, Ontario Health Insurance Plan (OHIP). The monies collected into OHIP comes from employees and employers in the province, mainly by payroll deductions. Citizens over 65, those with no taxable income, and those on welfare do not contribute. This OHIP contribution is the only portion that individuals can personally identify with health care, and in 1975 this amounted to \$132 per single person and \$264 per family. However, this employee and employer contribution is a small portion of the cost of health care. Including the federal and provincial components, the total cost in 1975 per single person was \$660; for a family it was \$1,320. This has increased over the past three years. The values are now approaching \$1,000 per single person and \$2,000 per family.

History of Physician Involvement

The medical profession's involvement in health care preceded the NHI program by several years. The Canadian Medical Association, although apprehensive, did not aggressively oppose a NHI plan, providing physicians could relate directly with their patients if they wished, and that the plan was not compulsory for either patients or physicians.⁵ In several of the provinces the medical profession provided leadership by developing non-compulsory, non-profit health care programs. Although these were successful and covered those who could afford

to join, the government was not willing to design a plan and give support to the lower socioeconomic group. The medical profession at this time was beginning to realize that a comprehensive NHI plan meant more than a method of paying for health services. It was, in fact, the beginning of a social reform with broader and more far reaching implications than the delivery of health care. More importantly, it meant a change in influence and power which would move the scales in favor of government. This important fact was not grasped fully by the profession, as many looked upon NHI only as an insurance plan.

FIGURE I
PROVINCE OF ONTARIO PHYSICIANS INCOME
STATISTICS PRE AND POST NHI* TAXATION
STATISTICS

Year	Average Net Income	% Change
1964	23,536	12.0
1965	25,314	7.6
1966	27,490	8.6
1967	30,974	12.7
1968	33,067	6.8
1969	35,924	8.6
1970	39,112	8.9
1971	42,045	7.5
1972	42,864	2.0
1973	43,444	1.4
1974	44,483	2.4

* Ontario's H.I. plan began in 1968.

To understand the statistics in Figure 1, it is important to touch upon the fee for service system in Ontario both prior to and following the advent of NHI. Prior to the introduction of NHI, the Ontario Medical Association (OMA), which represents approximately 90% of the provinces' physicians, possessed the power to determine its own fee schedule. Although individual physicians were not bound to the schedule and could charge what they wished, the vast majority adhered very closely to the published fee structure. In 1969 the OMA was required by law to notify the government of any changes in its fee schedule at least six months prior to the proposed changes. Of necessity a negotiating committee from the OMA would meet with government to determine fee revisions. The first revision, which did not take place until 1971, accounted for a 4.5% increase in the fee schedule. The overall percentage increase

was arrived at through joint negotiations with government, taking into consideration such factors as physicians' incomes, the trend of those incomes compared to other professions and wage earners, as well as other factors, such as inflation. The OMA negotiating committee, although quite free to give their opinion, had questionable impact on the decision, since the final decision remained entirely with the government. The results of this decision making is evident in Figure 1. Physicians' incomes decreased considerably and were brought closer in line to other professions and other wage earners who, during the same period, showed steady and significant increases in their net incomes (See Figure II).

In the beginning physicians had several billing options: (1) bill the plan and accept 90% as payment in full; (2) bill the plan, accept 90% and bill the patient for the extra 10%; (3) bill the patient, who in turn would be reimbursed by the government. These options proved to be a bit confusing to patients.

In 1971 a requirement for physicians to either opt in or opt out of the health insurance plan was established. An opted in physician can only bill the plan and accept 90% payment by government as payment in full. The opted out physician can only bill the patient. In this case the government reimburses the patient, who in turn pays the physician his full fee. The opted out physician can bill the patient the fee he wishes since the fee schedule is basically used as a guide for the physicians and is not an absolute figure for rendering services. However, it is illegal for a physician to bill beyond the fee schedule, unless the patient is informed of the fee before the service is rendered.

The provincial government has had to develop a very complex bureaucratic system to operate the provincial health plan. The exact costs of the bureaucracy is not known since no reliable figures are available, but the figures frequently quoted are somewhere between 10% and 20% of the total health care budget.

The centralization of administrative activities along with computer technology opened the way for government to survey physicians as to their patterns of practice and income. A profile has been established on each physician. This has various uses, the main one being identifying deviations from normal income patterns as they apply to other physicians within any given specialty or group.

In the beginning, government had no effective way of controlling physicians' incomes. They attempted to verify that the services billed for were actually rendered by sending, at random, monthly audit letters to subscribers. This caused problems

with the doctor-patient relationship and was discontinued after a few years.

Medical Review Committee

Subsequently, a Medical Review Committee was established by the Ontario government in 1972. This committee consists of representatives from government and the licensing authority for physicians of Ontario, known as the College of Physicians and Surgeons. The committee is composed of eight members, six of whom are appointed by the government on recommendation from the College of Physicians and Surgeons and two non-physicians who are appointed by government.

The review committee receives information from the provincial government primarily regarding physicians identified by the computer as having abnormal patterns of practice. The review committee may seek more detailed information regarding identified physicians in one of several ways: they may request an interview with the physician; they may review the physician's records; or they may seek information from other appropriate sources. The involved physician has a legal obligation to (1) allow an inspector to visit the office, (2) cooperate with the inspector, (3) produce records when requested, and (4) appear before an Appeal Board or Court Proceedings if need be. Physicians found guilty of wrongdoing who wish to go beyond the appeal mechanism may take their case to the Supreme Court with appropriate legal counsel.

Needless to say, this review committee could have major impact on physicians' billing behavior, but it

is worth noting that the vast majority of physicians investigated have been found to be practicing ethical and responsible medicine. Their deviations from normal have been on the basis of different patterns of practice, such as working long hours or having certain specialty interests which set them apart from their colleagues.

The medical profession is deeply concerned that the licensing body has a quasi official relationship with government and a responsibility in policing the Health Insurance Program. They accept this relationship, however, because it is the lesser of two evils. They would rather have the present situation than have government do the policing on its own.

Although the OMA continued to negotiate its schedule with government, their bargaining position was greatly undermined by the plethora of statistics the government had accumulated on physicians' incomes. As a result, physicians have shown minimal gains in incomes compared to the rest of society over the past several years. This occurred at a time of considerable inflation when physicians' costs of practice were increasing rapidly. Physician unrest became evident. The OMA began to encourage its members to adopt one of their lawful options and opt out of the NHI plan.

In spite of persistent urging over the years by the OMA, the majority of members were reluctant to opt out. The prime reason may have been that they had become dependent on the rather simplified billing system established by government and were apprehensive about setting up a more cumbersome, private billing system which might have been more

FIGURE 11
TAXABLE INCOME OF ONTARIO PROFESSIONALS

	<i>Date</i>	<i>Physicians</i>	<i>Dentists</i>	<i>Accountants</i>	<i>Lawyers</i>	<i>Engineers & Architects</i>
Before Medicare	1964	23,536	16,238	13,830	20,199	16,433
	1965	25,314	17,622	14,024	21,963	19,102
	1966	27,490	18,766	15,342	24,928	21,527
	1967	30,974	19,957	15,464	26,089	21,594
	1968	33,067	22,015	18,105	27,854	22,453
% Change		40.5	35.6	30.1	37.9	36.6
After	1969	35,924	24,354	19,028	30,999	23,400
	1970	39,112	25,242	22,539	32,733	22,220
	1971	42,045	27,913	20,719	31,824	21,988
	1972	42,864	31,124	22,486	34,887	21,496
	1973	43,444	32,725	30,662	42,195	27,516
	1974	44,483	37,333	37,888	47,767	37,018
% Change		23.8	53.3	78.1	54.1	58.2

costly and not worth the 10% difference in fees between the OMA fee schedule and the amount being reimbursed by government.

Within the past year they have had reasons to change, since the OMA published a fee schedule with an overall increase of approximately 30%. This gave impetus for more OMA members to opt out, and the most recent statistics reveal that the opted out numbers have increased to 18%. This is presently causing grave concern to the government, since members of the opposition feel that a significant portion of the population are being deprived of adequate health care, especially in those areas where all physicians have decided to opt out and deal with patients directly. It is the responsibility of the provincial government, under the guidelines laid down by the federal government, to assure that all citizens have access to comprehensive health care. If this becomes jeopardized, it is quite possible that the government may enact legislation which makes it compulsory for all physicians to be in the plan. The reaction of both government and the medical profession to the present situation is critical, since both the Canadian Medical Association and the Provincial Medical Associations have been adamant in their position that in a democratic society, physicians should not be compelled to function within any medical plan.

Physician Exodus

Physicians who can afford the economic loss have accepted the government plan and continued practice as in the past. Those physicians who could not afford to suffer economic loss have coped with the problem by either increasing their office hours or seeing more patients per unit of time or both. Other physicians disenchanted with the present system have chosen to leave the country, thus explaining the exodus of approximately 800 physicians from Canada (the majority from the province of Ontario) during 1978.

This exodus, although of some concern to government, is not considered a major threat to the NHI plan. The reasons for this may be: younger people are lining up as never before to obtain a position in medical school; medical manpower studies are indicating the medical schools are producing too many physicians;⁶ and the government is giving serious thought to decreasing the numbers in the future. If government wished more physicians, the immigration gates which have been virtually closed for the past few years could be reopened. Also, the govern-

ment believes that the public is not very sympathetic to physicians' problems.

Medical Organization Efforts

Over the years the OMA has attempted to influence the government through behind-the-scene negotiations, much to the concern of members who wished a more aggressive approach. Only lately has the OMA become more vocal, encouraging its members to become active politically and to become more organized. They are attempting to educate their patients and the public about the health care issue and how it effects both themselves and the physicians. The physicians sincerely believe the quality of care is being compromised. The hiring of professional public relation experts and the organizing of its branch societies have finally brought physician concerns to the public. The exodus of physicians from the province has been a focal point of this concern.

What will transpire with their present efforts remains to be seen; however, most within the profession agree that political activities should have been instituted at a much earlier date. Physicians' incomes have been discussed openly, with most of the effort being directed to the family physician, the backbone of the primary care system in Canada. The public has been made aware that the average family physician's net income per hour is approximately \$18, and after taxes the hourly rate is not unlike that of many of the organized trades and other non-professional employees. The public has been receptive but has been quick to grasp one of our areas of weakness when defending incomes. They have noticed that the net income for specialty groups varies considerably, even though the period of postgraduate training and responsibility are similar. This discrepancy in income, which can be in excess of 100% among various groups, is difficult to explain in any logical manner and has been a problem in discussions with the public and government.

It may be appropriate at this point to make a few comparisons between United States and Ontario physicians with regard to income. Between 1970 and 1976, Canadian physicians had a 22.2% increase in net earnings compared to a 42.5% increase by American physicians. When one considers the purchasing power of the dollar and the fact that a U. S. taxpayer earning \$60,000 pays roughly the same taxes as an Ontario resident earning \$48,000, the end result is that in economic terms the U. S. physician is approximately 50% ahead of his Ontario colleague. I believe the answer is related to two factors, government control and the social consciousness and at-

titude of the public, with its direct effect on government.

Public accountability for the cost of health care has brought the everyday activities of physicians to public light and has focused undue attention on their incomes compared to other segments of society. The balance of power has shifted from the professional to the public arena.

Physician autonomy has been greatly reduced through various surveillance procedures. Physicians are subject to external central scrutiny of their work and income practices. Various bureaucracies influence their daily activities. Their economic position has declined in spite of longer work hours and seeing more patients. They have seen their public image decline, mainly due to factors largely out of their control. It is conceivable that the government feels that by controlling physicians' incomes they will be establishing a standard that will make it easier to control other professions and wage earners.

Government's Attitude and Response

At its inception NHI had virtually the complete support of government and has continued to do so until the present. Government is well aware that the vast majority of the population would not return to the previous health care system, as evidenced by a 1973 survey which revealed that approximately 90% of the public wished to continue the plan as it presently exists.⁷

It is almost certain that a government which would interfere with the present health insurance plan would not long be in power. It is evident from its actions that government is far more interested in the cost of health insurance than in the quality of health care that evolves. One cannot ignore, however, that the NHI plan has probably played some part in the marked improvement in health statistics that have occurred in Canada over the past decade. The infant mortality rate, which had been 20% greater than that of the United States prior to 1958, fell to 13% less by 1973.⁸ Maternal mortality has shown similar changes, as has life expectancy. Although we can contribute some of this improvement to other factors such as an increased number of doctors and better technology, the fact remains that Canada's position in the vital statistics roster has improved to be one of the best in the world.

In summary, the institution of a National or Com-

prehensive Health Insurance Plan is not just an insurance program. Comprehensive health insurance plans of a national scope are social in their aims, primarily because in our society they are part of a broader, liberal movement touching on basic human rights. Some would have us believe, rightly or wrongly, that health care is a social right, the payment of which should be shared by all citizens.

In undertaking these ideals, the social reform is carried out at the expense of those delivering the care. The physicians' power base and image in society becomes eroded, not to mention their incomes and standard of living. The physician sees this going on while other professions seem to remain unmolested and while society as a whole, especially the union-supported, seem to be acquiring more and working less. The end result is a profession in disarray, disillusioned and very concerned about the future.

I have attempted to place before you an overview of the evaluation of the NHI plan in Canada and more specifically, its operation in the province of Ontario. I intended not to make this a statistical analysis, but to give enough information for other physicians to draw their own conclusions. It is my hope that this information stimulates each and every physician to become more concerned about the subject of Comprehensive or National Health Care and how it will affect their future and, indeed, the future of their patients.

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The Maker

Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.



MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were

not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

MYTH: Industry favors only "expensive" brand names and denigrates all generics.

FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.

Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005



The President Speaking

Political Involvement

GERALD P. GABLE, M.D.
Hattiesburg, Mississippi

The Democratic and Republican primaries in this election year are now over, although the outcome of some of the races is yet in question. The independent candidates have now thrown their hats into the ring, and you should receive this issue of the JOURNAL a few weeks before you go to the polls to exercise your vote in the general election.

Perhaps never has your vote been more crucial, both because of the political issues involved affecting the future of medical practice, and because of the narrowness of some of the races (witness the five vote margin in the Southern District Highway Commissioner's race). It is imperative that we as individual physicians make the effort to familiarize ourselves with the views of the candidates on medical issues facing our state and nation. It is likewise imperative that we make our thoughts and wishes known to them.

In addition to our individual contact with the candidates, we can make our collective efforts felt at the national level through AMPAC, and at the state level through MPAC. In 1978 at the national level there were 1,873 PAC organizations which gave a total of 31.1 million dollars in the support of various candidates. The breakdown of the different PAC organizations and their contributions were as follows:

- 812 corporations — 8.8 million
- 275 labor PACs — 9.4 million
- 257 philosophical PACs — 2.2 million
- 529 trade and professional PACs — 9.5 million
- AMPAC — 1.2 million.

It is readily evident that the labor and trade PACs contribute the majority of all funds and consequently, usually get the most attention from the members of Congress as to which legislation they want passed. In contrast, the physicians of the country are at the "bottom of the totem pole" in both contributions and favorable Congressional support.

In our state our MPAC committee has been very active in analyzing the views and supporting the candidates favorable to medicine, and has done so on a very meager budget. In this year's state elections, there are 122 House seats and 52 Senate seats for re-election. MPAC has financially supported 37 candidates in the House in the first primary, and 30 of these won in the primary election. We likewise supported 18 senatorial candidates, 15 of which are still viable candidates.

In the general election, exercise your individual votes for the candidates who are most supportive of medicine's needs, and when you pay your association dues this year, exercise your collective vote by your contribution and support of AMPAC and MPAC.

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Effects of Electromagnetic Radiation on Humans

Recent editorials in your journal have discussed the hazards of ionizing radiation. Before leaving the subject of radiation damages, I feel it appropriate to discuss the current thinking on the effects of non-ionizing radiation on humans. Several recent articles in the electronic industry have questioned the safety, or dangers, associated with exposure to non-ionizing radiation.

Non-ionizing, or electromagnetic radiation is basically radio frequency energy. Electromagnetic radiation is produced by broadcast radio, television, citizens band radio, police communication, commercial radio, microwave, and other similar instruments. A tremendous increase in the utilization of such instruments by the general public has led to recent reviews concerning the dangers associated with electromagnetic radiation.

The effects of electromagnetic radiation on humans are said to be both thermal and nonthermal in character. To date, only the thermal effects have been adequately documented and represent the only dangers recognized by American industry. In contrast to ionizing nuclear radiation, which causes molecular damage with resultant genetic changes and cellular death, without heat production, the absorption of EMR causes no detectable ionization; however, molecular vibration caused by the passage of such energy through tissue produces heat. The amount of heat produced is proportional to the level of energy generated by the instrument, time of exposure, and source to subject distance. While microwave cooking is an excellent example of the application of EMR on animal tissues, the real human danger is associated with long-term exposure to less intense energy. A well documented form of EMR damage is microwave cataracts, seen in persons working with microwave energy and in persons cooking with faulty microwave ovens. Such cataracts are caused by heat production in the lens. Persons with any metallic implant such as a rod, plate, or other types of medical implants should

avoid close exposure to EMR energy sources as the metal heats more rapidly and produces surrounding tissue damages. The effects of EMR on cardiac pacemakers is also well known and such patients should avoid exposure. Such tissue heating is documented by the stories of military personnel assigned to the DEW line standing in front of large radar units to get warm.

The nonthermal effects of electromagnetic radiation are said to be behavior changes, malaise, restlessness, sterilization, fetal damage, and CNS changes. While none of these effects have been documented they are currently being critically evaluated, especially by the Russian electronic industry. In that country the maximum level of allowable exposure is far less than allowed in the United States, but no changes are foreseen until more adequate documentation is presented. A common nonthermal complaint associated with electromagnetic radiation has been the occurrence of headaches and mood changes in persons living very close to high tension power lines which produce electromagnetic radiation.

Until further evidence is produced, the medical field should accept the recognized thermal changes associated with EMR and encourage patients to avoid prolonged exposures to such energy sources. Physicians should also be aware of the claimed non-thermal effects of electromagnetic radiation and attempt to document or dispel such changes in patients.

MYRON W. LOCKEY, M.D.
Associate Editor
Jackson, MS

Misuse of the Emergency Room

In the early days of medical practice, there was no such entity as an "emergency room." When patients became ill suddenly or injured they were usually taken directly to the physician's office, or else the doctor was summoned to see them at the place the illness or injury occurred. The physician would then

EDITORIALS / Continued

primarily care for the illness or injury at the site by providing emergency medical treatment, splinting a bone, or binding a bleeding wound, then the patient was transferred to his own home or to the doctor's office for further treatment. Later, as medicine progressed and with the ravages of war, the old battalion aid station where the injured were formerly taken became the emergency facility as we now know it.

In its early history, an emergency room was truly a place where only real emergencies were cared for. The patient who had the usual upper respiratory tract infection, the child with the painful ear, or the patient with abdominal pain, were seen in the doctor's office and either treated there or sent on to a hospital for further care. Only the patient with a severe injury, such as one sustained in an automobile accident, with a gunshot wound, a myocardial infarction, a cardiac arrest, or some other similar emergency, was carried to the emergency room.

With the advent of insurance and third-party payments; however, coupled with the fact that these agencies are much more apt to make payment when a patient comes in an emergency, and with the increasing difficulty experienced by patients when making office appointments, the emergency room has now become a "catchall." That is, instead of handling strict medical emergencies, the emergency room has now become basically an outpatient clinic. Approximately 80% of the patients arriving in the emergency room are in reality nonemergency patients who could easily be treated in a physician's office and sent home with the administration of appropriate treatment.

While the federal government and the public are presently screaming about the high cost of medical care, we, as consumers, are making a very grave error in raising the cost of medicine by abusing the use of emergency facilities for cases other than genuine emergencies. There is little doubt that emergency medical costs are generally much higher than office charges, plus the fact that often emergency medical treatment in a number of respects is actually slower than that rendered in a medical office, particularly if the patient's doctor has to be summoned away from his office to come to the emergency to render the treatment. If the patient reports to the physician's office originally, much time can be saved and a trip to the emergency facility by the doctor is eliminated.

All of those who provide emergency care services recognize the abuse of the emergency room; how-

ever, little has been done to curtail this misuse. There is no doubt that a nationwide campaign is badly needed for the proper education of the public as to what represents a true emergency case requiring treatment in an emergency room. It might well prove ultimately beneficial if third-party payments for any illness or injury treated in an emergency facility not representing a true medical emergency be disallowed. Whereas, admittedly at times it is difficult to classify what constitutes a bonafide emergency, and though granted at times there is nowhere else available to take a patient who becomes ill or injured during the night, it certainly behooves us all, as we face possible further federal controls and increases in the cost of medicine to strive more diligently to educate the general populace in the proper use of available emergency facilities.

W. BRIGGS HOPSON, JR., M.D.
The Street Clinic
Vicksburg, MS 39180

(Reprinted from the May 1979 issue of "EMS Informer," published by the Division of Emergency Medical Services of the Mississippi State Board of Health.)

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Injection, 300 mg./2 ml.,
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and in 8 ml. multiple-dose vials,
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**When painful spasm
is the presenting
symptom...**



...in the functional bowel/irritable bowel syndrome*

Bentyl[®]

(dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

“The correlation of spasm relief and drug given was excellent.”

*This drug has been classified “probably” effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

Bentyl

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS

For use in the treatment of infant colic (syrup)

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis, cycloplegia; increased ocular tension; loss of taste; headache, nervousness, drowsiness; weakness; dizziness; insomnia, nausea, vomiting; impotence, suppression of lactation; constipation, bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage Bentyl 10 mg capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily (May be diluted with equal volume of water.) Bentyl 20 mg: *Adults:* 1 tablet three or four times daily. *Bentyl Injection:* *Adults:* 2 ml (20 mg) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Medico-legal Brief

In the somewhat frenetic outpouring of professional literature prompted by the mushrooming of new theories of liability in medical malpractice cases, one potential hazard has gone virtually unnoticed.

For every physician who is found liable for an act of malpractice in the hospital setting, there is a group of three or five or some number of other physicians who are also potential defendants: the members of the credentials committee that recommended approval of the application for privileges, or the members of the quality assurance committee that permitted flagrant practices to go on, or both.

Does a physician, by serving as a member of various hospital staff committees risk potential liability in the performance of those duties? The answer must be "yes." There is always potential liability in undertaking any activity that affects other persons. The liability attaches if there is a negligent act or failure to act that results in injury.

The real question is, "how great is the risk?" This article attempts to measure it.

The expansion of liability of entities beyond the treating physician can be traced to the case of *Darling v. Charleston Community Memorial Hospital*. The court allowed recovery against the hospital because there had been a failure to intervene despite obvious indications of malpractice. Perhaps the most discussion-provoking case since *Darling* is the *Corleto v. Shore Memorial Hospital* decision, where a trial court judge, ruling on a motion to dismiss the complaint as to certain defendants, held that the medical staff could be sued as an entity, and indicated that each member of the staff could have been sued individually.

The case law since *Darling* has placed three specific duties upon hospitals in regard to the activities of physicians using their facilities: (1) Physicians must not be permitted to violate rules established by the medical staff; (2) The hospital must formulate rules to ensure patient safety; (3) The hospital must supervise the selection and activities of staff physicians.

The actual holding of *Darling*, however, was that the hospital had a duty, through the medical staff, to supervise the specific treatment recommended by the physician. So most courts have rejected the basic premise of *Darling*, but they have adopted the implication therein that the hospital has a duty to investigate and review the competence of physicians who use its facilities. This includes the duty to use reasonable care in the granting of staff privileges, and a

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duty to terminate or limit staff privileges once the incompetence of a physician has become known. *Corleto* is an example of the theory of corporate negligence being carried to the extreme.

The significance of this to the individual physician is that implicit in every case since *Darling* is the potential liability of those individuals who undertake evaluation of professional colleagues.

The only practical method for determining competence available to a governing board is to rely upon a credentials committee or a peer group review committee of the medical staff. This practical necessity is perhaps both cause and effect of the requirement imposed by the Joint Commission on the Accreditation of Hospitals (JCAH) and state law requirements that, in fact or effect, make medical staff committees the agents of the governing board in review of the quality of the physicians' work.

But liability will be imposed, if at all, on the basis of some act, or failure to act, by the individual(s) involved. Agents of a corporation or other legal entity are personally liable if they fail to carry out or negligently carry out a duty owed to an injured party. The individual member of the committee involved is, of course, in the most vulnerable position. If there is evidence that the treating physician was, or should have been, known to be incompetent, such evidence would certainly be most damning against the physicians who had the first opportunity and responsibility to make that determination. It is these physicians who would have the most immediate contact with the incompetent physician, and the best opportunity to obtain knowledge of professional fitness.

Each link along the chain of responsibility — committee to full medical staff to governing board — reduces the degree of personal involvement and thereby makes the possibility of personal liability more remote. The result, of course, is that courts may tend to find new or expanded theories to impose corporate liability on the governing bodies. That is the immediate lesson of *Darling* and its progeny. But the root cause of such liability is negligence by one or more individuals in the process of evaluation.

From the standpoint of the person injured by a wrongful act, the relationship of the wrongdoer to a superior, be it employer, medical staff, governing board or whatever, is immaterial. The liability of the individual wrongdoer is based on the common-law obligation to act so as not to cause injury by a breach of duty to the victim.

The stated purpose of this article was to assess the degree of risk to a physician serving as a member of a staff committee that evaluates peer competence. The foregoing analysis is intended to make this point:

courts are expanding the potential liability of committee members, staff members, and members of governing boards. Plaintiffs' attorneys are more than willing to provide the opportunity for such expansion. Such holdings, particularly as applied to individual committee members, have a solid foundation in well settled common law principles. The only real surprise may be that such attempts to obtain additional sources for recovery have been so long in coming.

The assessment must be that significant potential liability does exist. The degree of risk is directly proportional to the degree of negligence on the part of the individual committee member. Both the diligent and the lackadaisical risk being named as defendants. That risk cannot be eliminated. The risk of suffering a loss, however, is minimal for the careful and perhaps staggering for the careless.

The lesson to be learned is this: The physician who serves on any committee responsible for evaluation of qualifications or practices should: (1) Investigate thoroughly; (2) Insist that records of the decisions of the committee and the facts upon which those decisions are based are recorded; (3) Be sure that the objection is made a matter of record in those instances where the physician disagrees with the decision of the committee; (4) Be certain that the individual professional liability insurance policy covers committee work; (5) Urge that the hospital itself carry liability coverage against actions of individual physicians and the medical staff as a whole; and (6) Above all, treat these matters with the care their potential danger warrants.

Reprinted from the March/April 1979 issue of *Malpractice Digest*, published by St. Paul Fire and Marine Insurance Company. The author is Edward E. Hollowell, J.D., of Raleigh, NC.

112th Annual Session
April 27-May 1, 1980
Biloxi Hilton
Mark Your Calendars Now!

POSTGRADUATE CALENDAR

Oct. 20, 1979

MISSISSIPPI ASSOCIATION FOR CHILDREN WITH
LEARNING DISABILITIES, State Meeting
University Medical Center

Sponsored by the Mississippi Association for
Children with Learning Disabilities and the Medi-
cal Center Division of Continuing Health Profes-
sional Education.

Coordinator: Austin W. Bunch, Ph.D., assistant
professor of special education, School of Educa-
tion, University of Mississippi.

This conference will focus on the rights of chil-
dren with learning disabilities in medical and psy-
choeducational diagnosis and treatment, and how
to encourage parental participation in the educa-
tion process. Fee: \$40 (\$15 for MACLS mem-
bers). Credit: 5 contact hours, .5 CEU, Category
1, AMA; AAFP applied for.

Nov. 1-2, 1979

MISSISSIPPI PERINATAL POSTGRADUATE COURSE
Jackson Hilton, Jackson

Sponsored by the University of Mississippi
School of Medicine Department of Obstetrics and
Gynecology, the Department of Pediatrics Divi-
sion of Newborn Medicine and the Medical Center
Division of Continuing Health Professional Edu-
cation.

Coordinators: John C. Morrison, M.D., professor of
obstetrics and gynecology, and Philip G. Rhodes,
M.D., associate professor of pediatrics and new-
born medicine division chief.

This course is designed as an update in perinatal
care. Topics will include infections in the neonate,
management of the pregnant diabetic and the or-
ganization of immediate newborn care. Fee: \$120.
Credit, 13 contact hours, 1.3 CEU, Category 1,
AMA; AAFP.

Nov. 16, 1979

PEDIATRIC NEUROSURGERY
University Medical Center, Jackson

Sponsored by the University of Mississippi
School of Medicine Department of Neurosurgery
and the Medical Center Division of Continuing
Health Professional Education.

Coordinators: Robert A. Sanford, M.D., associate
professor of neurosurgery, and Andrew D. Parent,
M.D., assistant professor of neurosurgery (part-
time).

This course will review some recent advances
in evaluation and management of pediatric pa-
tients with neurosurgical problems. Fee: \$50.
Credit: 5.5 contact hours, .55 CEU, Category 1,
AMA.

Dec. 6-8, 1979

FAMILY MEDICINE REVIEW
Holiday Inn Medical Center, Jackson

Sponsored by the University of Mississippi
School of Medicine Department of Family Medi-
cine and the Medical Center Division of Continu-
ing Health Professional Education.

Coordinators: T. Walter Treadwell, M.D., professor
of family medicine, and Henry J. C. Scrimgeour,
M.D., assistant professor of family medicine.

This three-day course is offered as a refresher
for primary care physicians. Discussions will
cover new developments in patient care. Fee: \$85.
Credit: 18 contact hours, 1.8 CEU, Category 1,
AMA; AAFP.

FUTURE CALENDAR

Jan. 7-11, 1980

PRACTICE OF ELECTROCARDIOGRAPHY
University Medical Center, Jackson

Jan. 18-19, 1980

ONCOLOGY II
Holiday Inn Medical Center, Jackson

Jan. 24-26, 1980

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS
COURSE
University Medical Center, Jackson

Feb. 7-9, 1980

RENAL UPDATE
Holiday Inn Medical Center, Jackson.

March 13-15, 1980

SURGICAL FORUM VII
Holiday Inn Downtown, Jackson

All continuing education correspondence should
be addressed to: Continuing Health Professional
Education, University of Mississippi Medical
Center, 2500 North State Street, Jackson, MS
39216.

MEDICAL ORGANIZATION

Jail Health Project Gets Underway

The MSMA Jail Project Advisory Committee, meeting in Jackson last month, formulated plans to implement the state's Jail Health Project, which the association is conducting in cooperation with the AMA. Committee chairman Dr. Virginia Tolbert of Ruleville stated that perhaps as many as 15 of the state's jails can be expected to participate in the project to upgrade health standards in correctional facilities during the first year.

Mississippi is one of seven new states added to the three-year-old national program which is funded by the Law Enforcement Assistance Administration (LEAA) of the U. S. Justice Department. Thus far, some 69 jails in 15 states have been accredited by the AMA as meeting an appropriate level of health care. The standards were established by a committee composed of physicians, dentists, ex-inmates, correction officers, clergymen, and others.

The advisory committee will work with project coordinator Ella Tardy of Jackson to select the participating jails, to give technical assistance to sheriffs and jailers, to coordinate efforts of volunteer physicians and local and county authorities, and to monitor and evaluate the program.

Serving on the committee with Dr. Tolbert are Drs. David A. Ball of Batesville, Frank Covington, Jr., of Jackson, W. Moncure Dabney of Crystal Springs, William E. Riecken, Jr., of Jackson, Robert Smith of Jackson, Faye G. Spruill of Jackson, David R. Stechkler of Natchez, C. D. Taylor, Jr., of Pass Christian, and Thomas E. Waller of Starkville.

SBH Offers Influenza Vaccines

Physicians who wish to participate in the Mississippi State Board of Health influenza immunization program should contact their county health department to order this season's supply of vaccine, according to Herb Loy, program coordinator.

Local health departments were scheduled to receive the vaccine in mid-September. In this year's formulation are A Brazil, A Texas, and B Hong Kong antigens, Loy said.

The program coordinator is working closely with a statewide public awareness committee of health professionals and volunteers who aim to get the 441,000 Mississippians in the high risk group protected from influenza with flu inoculations. The committee is using mass media and personal promotion to encourage the immunization of those 65 years of age and older and those who have heart, lung, or kidney disease, diabetes, anemia, or other chronic illness.

Dr. Boyd Shaw of Jackson, MSMA's representative on the public awareness committee, emphasizes the need for preventive medicine for the elderly and chronically diseased. Dr. Shaw said, "Influenza immunization is a worthwhile consideration in the high risk patient, particularly as the winter season approaches. I encourage other physicians to make flu vaccine available to their patients."

In providing influenza vaccine to private physicians, the State Board of Health requires agreement that no fee will be charged for the vaccine; the physician may charge for administration of the vaccine. The agency also requires that the physician use his medical judgement or have his patient sign an Important Information (informed consent) Statement.

Additional information is available from the State Board of Health Division of Immunization.

Council Changes Annual Session Format

The Council on Scientific Assembly voted to make some changes in the format for MSMA's 112th annual session. The 1980 session will feature a more general scientific program. Several scientific sections will coordinate plans to produce general meetings on Sunday, Tuesday and Wednesday mornings. Specialty societies may plan individual scientific meetings for the afternoon, however.

Special events will include golf and tennis tournaments, a practice management seminar, and medical alumni meetings. The Biloxi Hilton will again be the site for the annual session, scheduled for April 27-May 1.

Jail Health Project Coordinator Is Named



Ella Tardy

Ella Tardy of Jackson has been named project coordinator for the Jail Health Project, the MSMA and AMA-sponsored program to upgrade standards of health care in the state's jails. She was formerly associated with the Mississippi State Board of Health, serving as deputy director of the WIC Program, a supplementary food program for women, infants and children.

The Crystal Springs native received the B.A. degree in sociology and the Master of Public Administration degree from the University of Mississippi. She is married to Thomas W. Tardy, III, a Jackson attorney.

The Jail Health Project office is located in the MSMA headquarters building.

CME SEMINARS

"Office Endocrinology"—Oct. 25
Forrest County General Hospital
Hattiesburg, MS

"Oncology Symposium"—Oct. 26-27
Mississippi Baptist Medical Center
Jackson, MS

Chuck Dunn Joins MMFES Staff



Charles M. "Chuck" Dunn has joined the staff of Mississippi Medical Fraternal and Educational Society. His responsibilities will include claims administration and risk management. A native of Yazoo City, he graduated from Delta State University. For the past several years, he has been associated with the Western Insurance Company in Jackson. Chuck's wife is the former Beverly Britt of Duck Hill.

Health Commission Names Director

Thomas J. Brooks, III, of Jackson has been named executive director of the Mississippi Health Care Commission. The agency will administrate the state's certificate of need approval process.

Brooks has held positions at the Mississippi State Board of Health and the State Commission on Budget and Accounting. His father, T. J. Brooks, Jr., M.D., is professor of preventive medicine at the University Medical Center. His brother, Michael P. Brooks, M.D., is an ENT specialist in Laurel.

Dr. Jack A. Atkinson of Brookhaven is chairman of the Health Care Commission, which was created by the legislature this year to replace the State Planning and Development Agency established by Governor Finch.

UMC Receives Cancer Research Grant

The University of Mississippi Medical Center has received an institutional grant for cancer research from the American Cancer Society, Inc. (ACS).

According to Dr. Norman C. Nelson, UMC vice chancellor for health affairs, the two-year \$40,000 award will be used as seed money to help Medical Center scientists develop cancer research projects.

Dr. Francis Morrison, UMC professor of medicine and director of the division of hematology, chairs the Medical Center's cancer research advisory committee which obtained the grant.

NEW MEMBERS

LORA, FERNANDO, Eupora. Born Cochabamba, Bolivia, Feb. 1, 1943; M.D., Facultad de Medicina de la Universidad Mayor de San Simon, Cochabamba, Bolivia, 1968; interned University Hospital, Washington, DC, one year; surgery residency, same, 1972-73; surgery residency, Prince George General Hospital, Maryland 1973-74; surgery residency, Wilson Memorial Hospital, New York 1973-77; elected by North Central Medical Society.

PERSONALS

BETTY M. BAILEY, formerly of Jackson, has joined the staff of Memorial Hospital at Gulfport, for the practice of anesthesia. She is associated with ALTON PERRY.

WILLIAM M. BILLINGTON, a New Mexico native, has established his general medical practice in West Point.

BARBARA A. BOLLING has associated with Woman's Clinic, P.A., in Gulfport, for the practice of obstetrics and gynecology.

JOHN CRANSTON BONNELL of Prince Edward Island, Canada, has opened an office in Okolona for the general practice of medicine.

WILLIAM D. BRIDGES of Pascagoula announces the association of WILLIAM H. VAUGHAN for the practice of psychiatry.

HUGH P. BROWN of Jackson announces the relocation of his office for the practice of pediatric orthopedics and scoliosis to Doctors Building, Suite 419, 744 McCallie Avenue, Chattanooga, TN.

CAROLYN BUTTROSS has associated with Gulf Coast Surgical and Diagnostic Center, P.A., in Ocean Springs, for the practice of pediatrics.

RICHARD C. CARTER has joined Attala Medical Clinic in Kosciusko for the practice of family medicine.

CHARLES A. COOK of Biloxi has been named director of the State Board of Health's hypertension program and assistant chief of the Bureau of Disease Control.

JACQUELINE O. DAVIS has associated with the Todd Medical Clinic in Natchez for the practice of obstetrics and gynecology.

ROBERT E. DECoux, JR., has associated with LARRY B. AYCOCK and JOHN D. MORGAN of McComb for the practice of internal medicine and gastroenterology.

W. WILSON DEFORE, JR., has associated with Jackson Surgical Group, P.A., for the practice of thoracic, vascular and general surgery.

MARSHALL G. EDMONDSON has joined Radiology of Tupelo, P.A., for the practice of radiology.

WILLIAM G. GILLES, a native of Capetown, South Africa, has associated with HARRY C. FRYE and WARREN A. HIATT of Magnolia for the general practice of medicine.

HOWARD W. ELLZEY, formerly of Memphis, has relocated his medical practice to the Sardis Dam area.

DANIEL D. GAMBRELL of Jackson has opened an office for general practice in Yazoo City.

CHARLES J. GRUICH has opened his office for the general practice of medicine at 1210 W. Division Street, in Biloxi.

JAMES R. HARDIN has associated with JAMES S. ROBBINS for the formation of the Greenwood Urology Clinic, located at 205 Eighth Street.

FRANKLIN R. HAYDEN of Marroro, LA, has established his medical practice in association with JOE H. POWELL of Poplarville.

FRANK T. LANSDEN announces the relocation of his office for plastic and reconstructive surgery to Coastal Medical Center, Gateway Executive Park, Biloxi.

HENRY L. LEWIS has opened an office at 1510 E. Harrison Street, McComb, for the practice of family medicine.

PERSONALS / Continued

BOULDIN MARLEY, JR., has associated with the Woman's Clinic in Clarksdale for the practice of obstetrics and gynecology.

ARTHUR MATTHEWS, JR., has associated with GERALD WESSLER and RONALD L. BROWN of Gulfport for the practice of adult and pediatric urology.

MICHAEL E. MOSES has associated with DONALD A. HOPKINS for the practice of general surgery at Gulfport Surgical Clinic.

FEMI OKUNOREN, a native of Nigeria, has opened an office for family practice in Olive Branch.

EDWIN R. ORR, III, announces the opening of his office for family practice and internal medicine at 8 E. Marion Street in Pontotoc.

STANFORD A. OWEN announces the opening of his practice in internal medicine at 711 6th Avenue, Picayune.

ONEY C. RAINES, III, announces the opening of his office for the practice of obstetrics and gynecology at 1213 Broad Avenue, Gulfport.

FREDERICK D. ROGOFF has associated with ROBERT D. HOLBERT of Pascagoula for the practice of nephrology and hypertension.

WILLIAM F. SEITH, JR., announces the opening of his office for the practice of neurology at 121 W. Jackson Street, Biloxi.

THOMAS A. SHANDS has established his internal medicine practice at 301 Oxford Road, New Albany.

JOHN R. STRIPLING, III, has opened an office for the practice of urology at 1213 Broad Avenue, Gulfport.

RICHARD M. VISE has joined Rush Medical Group in Meridian for the practice of urology.

ROBERT C. WESSLER has opened a Gulfport office for the practice of dermatology.

DEATHS

VICKERY, GEORGE WILLIS, Gulfport. Born May 1, 1912; M.D., Medical College of Georgia, Augusta, 1934; interned Charity Hospital of Louisiana, New Orleans, 1938-39; urology residency, same, 1939-42; died Aug. 30, 1979, age 67.

QuinammTM

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS: For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

CONTRAINDICATIONS: Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

PRECAUTIONS: Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication. Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

ADVERSE REACTIONS: Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued.

DOSAGE AND ADMINISTRATION:

1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

U.S. Patent 2,985,558

Merrell

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
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for Knotts in the night



QuinammTM

each tablet contains quinine sulfate 260 mg., aminophylline 195 mg.

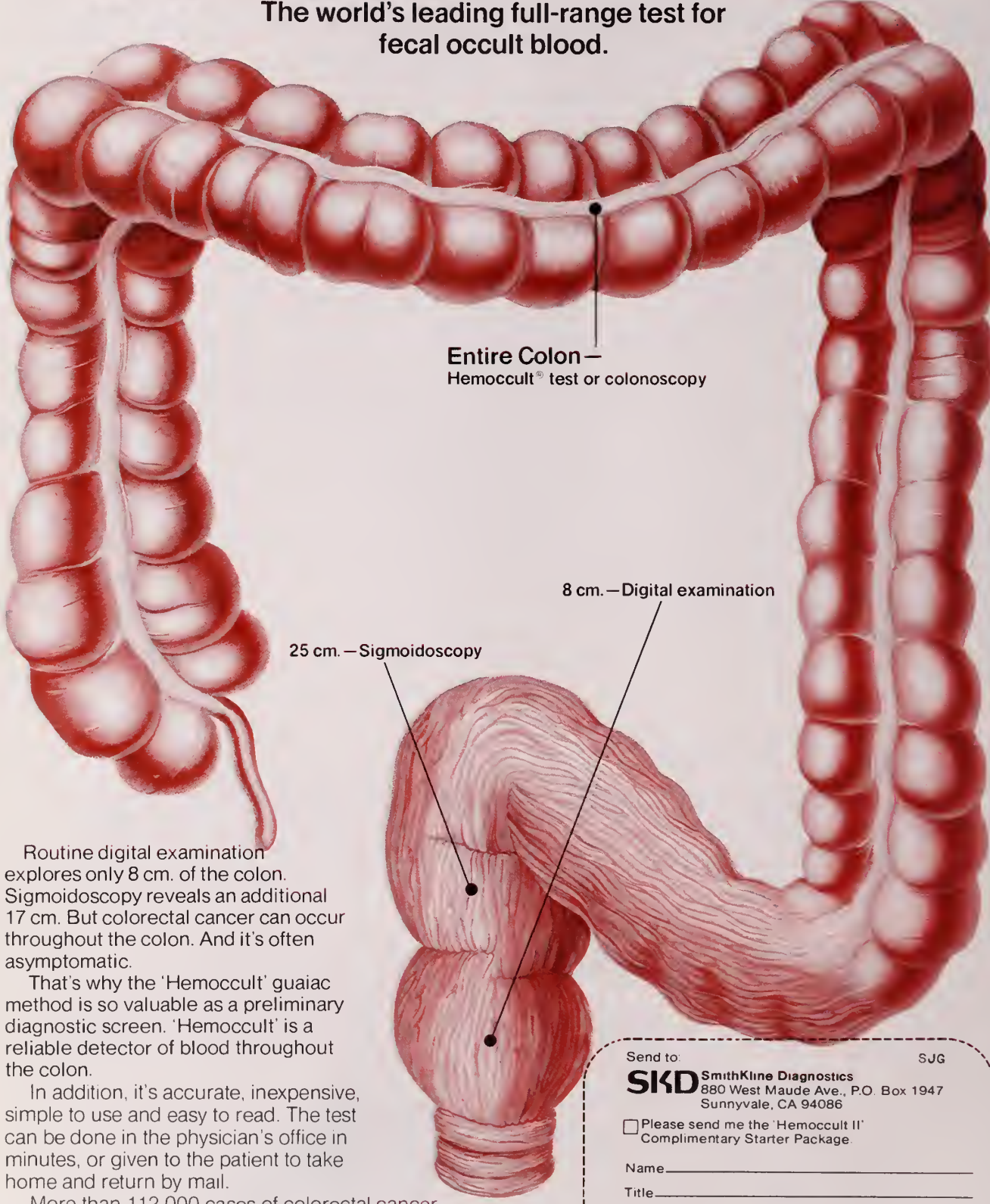
specific therapy for painful night leg cramps

Nocturnal recumbency leg muscle cramping is frequently an unwelcome bedfellow for many patients—especially those with arthritis, diabetes or peripheral vascular disease... consider Quinamm... simple, convenient dosage—usually just one tablet at bedtime... can provide restful, welcome sleep without night leg cramps.

See opposite page for prescribing information.

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25 cm. — Sigmoidoscopy

Routine digital examination explores only 8 cm. of the colon. Sigmoidoscopy reveals an additional 17 cm. But colorectal cancer can occur throughout the colon. And it's often asymptomatic.

That's why the 'Hemoccult' guaiac method is so valuable as a preliminary diagnostic screen. 'Hemoccult' is a reliable detector of blood throughout the colon.

In addition, it's accurate, inexpensive, simple to use and easy to read. The test can be done in the physician's office in minutes, or given to the patient to take home and return by mail.

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Title _____

Institution _____

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MEETINGS

National and Regional

American Medical Association Winter Scientific Meeting, January 12-15, 1980, San Antonio, TX; James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi Academy of Family Physicians, Annual Meeting, July 1980, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Mississippi State Medical Association, 112th Annual Session, April 27, 1980, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638, Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, January, April, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., B6 Medical Arts Bldg., 1151 N. State St., Jackson 39201. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson, Yazoo.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 p.m., Clarksdale. Henry McCrory, Secy., P.O. Box 340, Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, 1st Wednesday, January, March, May, September and November. H. S. Barrett, Secy., P.O. Box 1898, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. W. W. East, Secy., P.O. Box 4128 West Station, Meridian 39301. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, 1st Tuesday, February, June, September, December, Ramada Inn, Natchez. Walter T. Colbert, Secy., P.O. Box 1167, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, December. Paul Mink, Secy., 314 W. Adams St., Kosciusko 39090. Counties: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. James M. Cooper, Secy., 605 Garfield St., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, March, August, December. Cherie Friedman, Secy., 424 South 5th, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Thomas Waller, Secy., P.O. Box 1487, Starkville 39759. Counties: Clay, Oktibbeha, Lowndes, Noxubee.

Singing River Medical Society, 3rd Monday, February, May, August, November. Robert D. Holbert, Secy., P.O. Box 1502, Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. Clyde Allen, Secy., 1245 N. 6th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, Secy., The Street Clinic, Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39216

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Hospital
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Delta Medical Center
Greenville, MS 38701

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

Mississippi Chapter
American College of Surgeons
Box 5229
Jackson, MS 39216

Mercy Regional Medical Center
100 McAuley Drive
Vicksburg, MS 39180

St. Dominic-Jackson Memorial Hospital
Lakeland Drive
Jackson, MS 39216

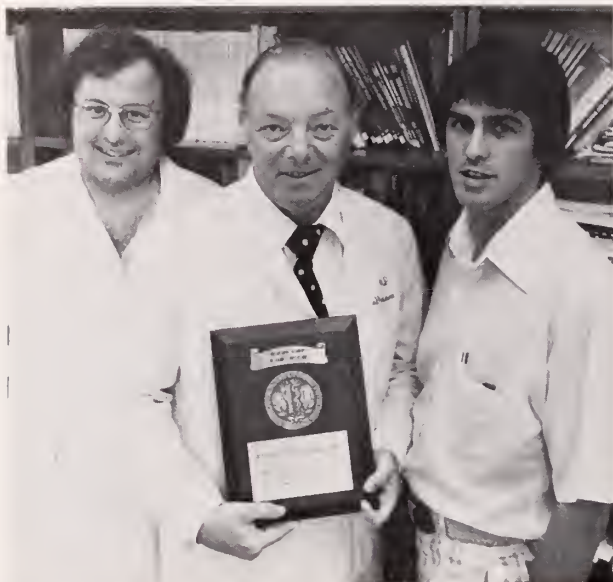
North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
2809 Denny Avenue
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Family Medicine Awards Presented to UMC



UMC family medicine department chairman Dr. Wilfred R. Gillis, center, received an award from the Mississippi Academy of Family Physicians during MAFP's annual meeting in Biloxi. Dr. Mark Clasen, left, and Peter Anthony Saway received student awards.

State AAMA Officers Are Elected



The 1979-80 president of the American Association of Medical Assistants — Mississippi Society is Mrs. Marian Cook of Tupelo, seated. With her are other officers and board members, left to right, Miss Carol Lockey, vice president, Pearl; Mrs. Helen Donohoo, treasurer, Gulfport; Mrs. Gladys Lamb, secretary, Greenwood; Mrs. Jackie Balducci, board member, Clarksdale; Mrs. Evelyn Wright, board member, Plantersville; and Mrs. Glenda Jenkins, president-elect, Meridian.

Alcohol and Drug Abuse Conference Is Scheduled

Nearly 1,000 physicians, allied professionals, counselors, law enforcement officials, clergy, recovering addicts, and laymen are expected to attend the Fourth Southeastern Conference on Alcohol and Drug Abuse in Atlanta Dec. 5-9.

The conference, sponsored by Peachford Hospital, an Atlanta psychiatric hospital, and the American Medical Society on Alcoholism, has been approved for 27 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Continuing education credit for nurses has been applied for.

For more information, contact the conference chairman, Conway Hunter, M.D., Peachford Hospital, 2151 Peachford Road, NE, Atlanta, GA 30308; telephone (404)255-3200.

PLACEMENT SERVICE

The Mississippi State Medical Association offers this placement service free of charge to Mississippi hospitals or clinics seeking physicians, and to physicians seeking to relocate in the state. Display advertisements will be charged at regular rates. Out-of-state clinics advertising for physicians will be listed in the classified department at regular classified rates.

Physicians Wanted

OTOLARYNGOLOGY ASSOCIATE desired for ENT practice. Modern clinic near major hospital. Active allergy division. Contact: James E. Harris, M.D., P.O. Box 671, Hattiesburg, MS 39401. Telephone (601) 264-4407 (office) or (601) 584-7420 (home).

FAMILY PRACTITIONER or general practitioner with surgery interest. Free office space. Moving expenses paid. Modern 36-bed hospital with 60-bed extended care facility. Contact: Nick Wilson, Administrator, Quitman County Hospital, Box 330, Marks, MS 38646. Call collect (601) 326-8031.

Situations Wanted

PEDIATRICIAN desires opportunity to practice pediatric nephrology with a limited amount of general pediatrics. Concluding a three year fellowship in June 1980. Contact: James R. Matson, M.D., University of Iowa Hospital, Department of Pediatrics, Iowa City, IA 52242.

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Belton Electronics Corp.	3	Ortho Pharmaceuticals	6B, 7
Burroughs Wellcome	4		
		Pharmaceutical Manufacturers Association	234, 235
Canton Exchange Bank	15	Premier Printing	15
Citizens Bank	6		
		Riverside Hospital	12
Harrel Chevrolet-Oldsmobile	6	Roche Laboratories	second, third, fourth covers, 14B
Eli Lilly and Co.	8		
		Smith, Kline and French	238A
Loma Linda Food Co.	6A	Smith Kline Diagnostics	246B
Merck Sharp & Dohme	10D, 16, 17	Universal Consult	238
Merrell National	14, 14A, 238B, 239, 240, 246, 246A	The Upjohn Company	10A, 10B, 10C, 10D
Metairie Women's Center	19		
Miss. Medical Fraternal and Educational Society	18	Thomas Yates and Co.	10

IN CONCLUSION

Five states - Alabama, Arizona, Idaho, Illinois and Indiana - may lose all Public Health Service funds because their state health planning and development agencies (SHPDAs) are not in compliance with federal standards. They have already been denied the average \$345,000 in planning funds, and now stand to lose all funds for community mental health, alcohol and drug abuse programs unless proposed Congressional action is passed. Only half of all states have an approved SHPDA; the others are operating under conditional designation.

Women who use oral contraceptives should not smoke cigarettes, says a report in the September 14 Journal of the American Medical Association. Researchers have determined that cigarette smoking is an overwhelming risk factor for vascular disease in women, following a study of more than 16,000 women over more than six years. Smokers have a relative risk of 2.9 for heart attacks, 5.7 for brain hemorrhage, 4.8 for other strokes and 3.9 for blood clots. In oral contraceptive users who also smoked, the relative risk of brain hemorrhage jumped to 21.9.

Lack of exercise increases a man's risk of heart disease, but not much; high blood pressure, smoking, overweight and high cholesterol are more dangerous risk factors, states a report in the Archives of Internal Medicine. The effect of being sedentary on death rate is rather modest for men, compared to the effects of other risk factors. The study followed 1,909 men and 2,311 women who were assessed for level of physical activity, and then observed for 14 years to determine how many suffered heart disease.

The American College of Physicians and W. B. Saunders Co. have entered into an agreement to publish books about health for the general public. "Prevention of disease is less expensive for the individual than treatment of his disease, and educating the public about health will contribute to reducing the cost of medical care," said a spokesman. Among the first books to be published will be works dealing with medical emergencies, exercise and heart disease, and various disorders of the digestive system.

"Psychotherapeutics" is the new Southern Medical Association Dial Access Program. Prepared by the Department of Psychiatry of Duke University Medical Center, the tapes and manuscripts relate to the diagnosis and treatment of mental illness and are designed for the physician who faces a specific clinical problem in management of a mentally ill patient. A catalog of the 103 psychotherapeutics tapes, or any others, is available from Southern Medical Association, 2601 Highland Avenue, Birmingham, AL 35205; (205) 323-4400.

Before prescribing, please consult complete product information, a summary of which follows:

The effectiveness of Valium (diazepam) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets in children under 6 months of age, known hypersensitivity, acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

ORAL: Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication, abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE: To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V. inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins, i.e., dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest, concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea, have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status

Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence, can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), i.e., phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function, avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

INJECTABLE: Although promptly controlled seizures may return, readminister if necessary, not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures, use topical anesthetic. Have necessary countermeasures available. Hypotension or muscular weakness possible particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

INJECTABLE: Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm, pain in throat or chest have been reported.

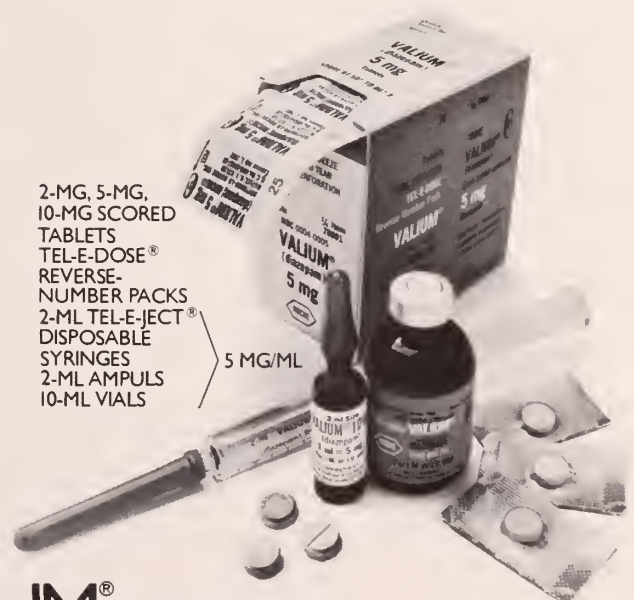
Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure, employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects. Dialysis is of limited value.

Supplied: Tablets, 2 mg, 5 mg and 10 mg, bottles of 100 and 500.

Tel-E-Dose* (unit dose) packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10. Prescription Paks of 50, available singly and in trays of 10. Ampuls, 2 ml, boxes of 10. Vials, 10 ml, boxes of 1. Tel-E-Ject* (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.



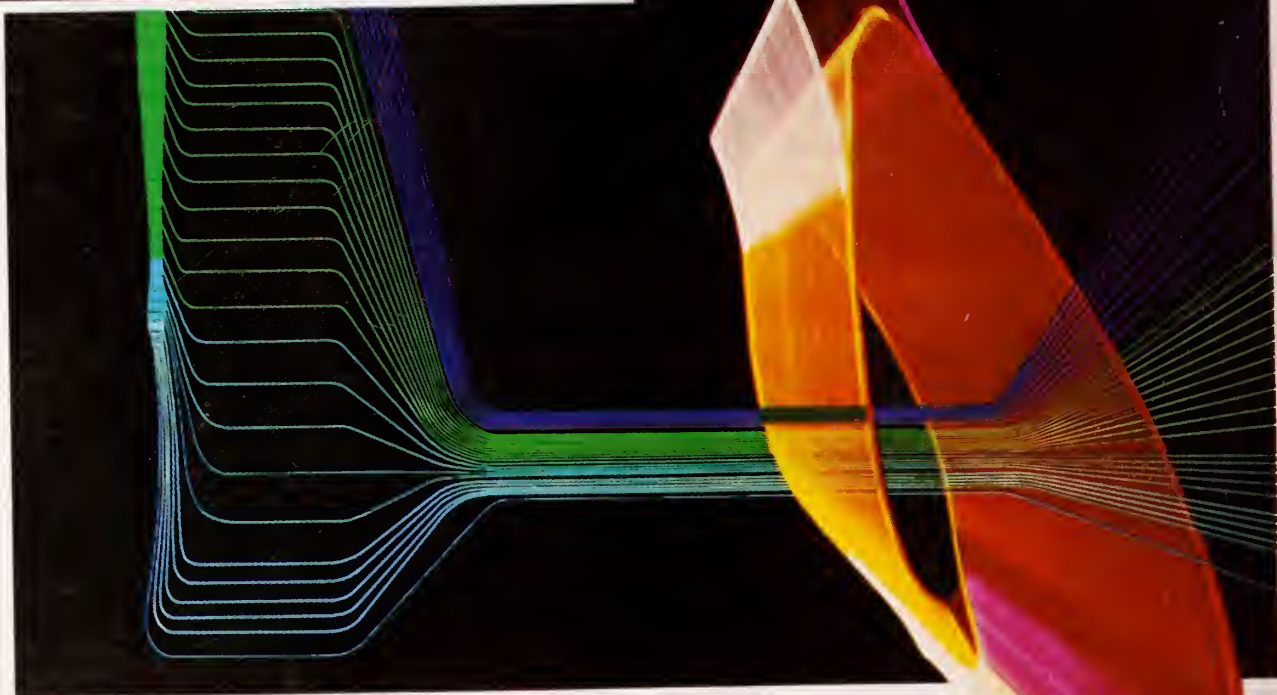
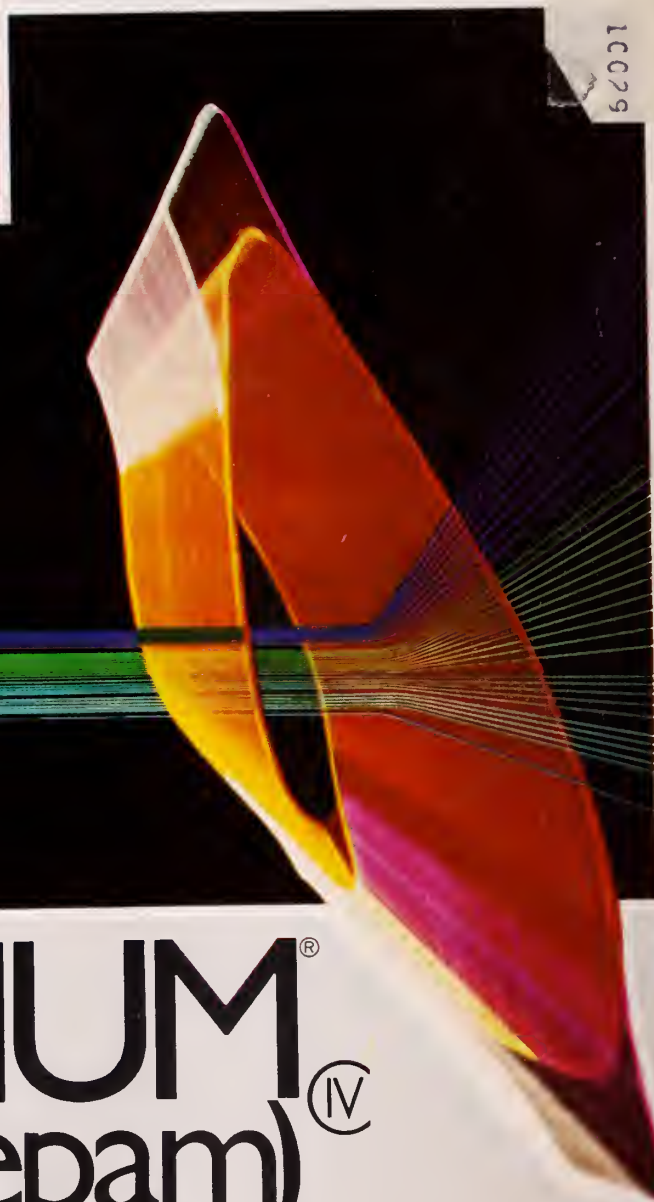
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NEW YORK ACADEMY
OF MEDICINE

Please see preceding page for a summary of product information.

ROCHE

November 1979

BALCONY

Journal of the
State Medical
Association

Mississippi

(ISSN 0026-6396)

Contents:

Noninvasive Diagnosis
of Carotid Artery
Disease

Transcutaneous Nerve
Stimulation

Ultrasound B-scanning
of the Poorly Visualized
Kidney



A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium®
diazepam/Roche
2-mg, 5-mg, 10-mg scored tablets
**a prudent choice in psychic
tension and anxiety**

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed, adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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'Innovation' is the watchword at Thomas Yates & Co. We believe in leaving the beaten path...in changing the way of doing things. Our aim is to steadily strengthen membership benefit programs through the introduction of new and improved coverages...to give buyers better protection for the money and to make insurance more convenient and adaptable...and to back up the plans we install with imaginative and thorough service.

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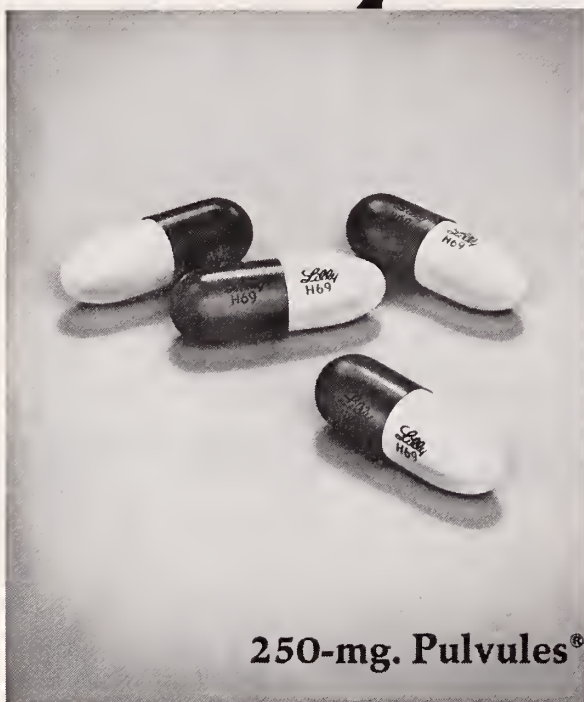
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Number 11

November 1979



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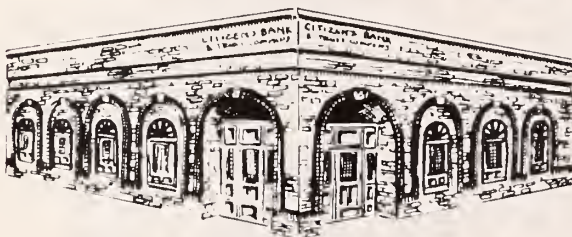
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States Must Lower Payment Error Rates

The Department of HEW has proposed new regulations, mandated by Congress, calling for states to reduce their annual payment error rates for welfare and Medicaid to four percent by Sept. 30, 1982.

States that fail to achieve these reductions will lose the federal share of erroneous payments which exceed the maximum allowed error rate.

The proposed regulations would allow HEW to grant a state a waiver from achieving its phased reductions, but only under extreme circumstances and then only after the state has demonstrated that it had made a good faith effort to establish systems to bring errors down. The new regulations would take effect Sept. 30, 1980.

FDA Criteria for Skull Radiography Are Questioned

Elimination of costly and often unnecessary x-ray evaluation was the goal of recently proposed guidelines by the Food and Drug Administration (FDA) for "high yield criteria," to assist physicians in deciding whether to order skull radiography.

However, a retrospective analysis of 75 skull fracture patients who were admitted to two community hospitals in Virginia indicates that 36 of the skull fractures would not have been detected if only the FDA "criteria" had been used.

The study was reported in the article, "High Yield Criteria and Emergency Department Skull Radiography: Two Community Hospitals' Experience," published in the Oct. issue of *JACEP, Journal of the American College of Emergency Physicians and the University Association for Emergency Medicine*.

The selection of patients to x-ray is based on history and physical examination results. Examples of the criteria include an established history of unconsciousness, a palpable skull depression, discharge from ear or nose, blood in the middle ear, and presence of coma or stupor unrelated to alcohol ingestion.

"We believe it is desirable to conserve financial medical resources, and establishing a protocol or set of criteria for determining when to use certain procedures is one way to help conserve resources," the authors said. "But based on our study, we think further clinical testing and more retrospective studies like this must be done before the FDA's high yield criteria are accepted and recommended."



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...in the functional bowel/irritable bowel syndrome*

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helps control abnormal motor activity
with minimal anticholinergic side effects[†]

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

“The correlation of spasm relief and drug given was excellent.”

*This drug has been classified “probably” effective in treating functional bowel/irritable bowel syndrome.

[†]See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations, mydriasis; cycloplegia, increased ocular tension, loss of taste; headache, nervousness, drowsiness; weakness; dizziness; insomnia, nausea, vomiting, impotence; suppression of lactation; constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup. *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg. *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine[®] (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

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HEW Names Jackson As Potential HMO Area

The Department of HEW is finalizing an HMO market development plan which is intended to increase HMO enrollment to 19 million people within 10 years.

Jackson, MS is one of 61 communities which have been designated for special attention under the program. Twenty cities will be included because of high health care costs, 22 were chosen because of above-average costs, and 19 were selected for their high population growth rates. Jackson was included in the latter category.

Health Bills Become Law

President Carter recently signed into law a bill authorizing \$45 million to be spent over three years for disease prevention and health promotion programs by HEW. The law also authorizes an additional \$12 million for the National Health Service Corps and a one-year, \$103 million extension of federal aid for nursing education.

Another bill, a three-year extension of the health planning law, was also signed by the President. It extends certificate of need approval for physicians' offices only in cases where expensive equipment (\$150,000 or more) is to be used for hospital inpatients. It permits states to set broader certificate of need requirements if such laws are enacted before Sept. 30, 1982.

Come Help Us Celebrate The Child

St. Jude Children's Research Hospital continues its search for life-saving knowledge about childhood disease. And this search continues because people care. There is no charge to patients or their families. And the cost of drugs, equipment, and research programs is met primarily by public contributions. Help us celebrate the child by sending your tax-deductible check or request for further information to St. Jude Children's Research Hospital, 539 Lane Avenue, Memphis, TN 38105.



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NEWSLETTER

November 1979

Dear Doctor:

In testimony at Senate oversight hearings on the Federal Trade Commission, AMA counsel Newton Minow charged that the agency "has gone too far." He urged that Congress act to "clarify that the Commission is not intervene in decisions that, in our federal system, rightfully belong to the elected representatives of the people of each state." He stated that it is AMA's belief that Congress never intended to authorize the Commission to pre-empt state laws.

Minow also urged Congress to clarify that the agency "is not to intrude into areas of society in which the standard of competition must be tempered by other values not considered by the FTC in its regulation of the common marketplace...such as the concerns for professional self-regulation in the public interest."

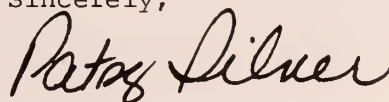
The members of the Consumer Subcommittee of the Committee on Commerce, Science and Transportation, which is conducting the hearings, also heard Minow declare that "we are witnessing an unprecedented effort by a federal agency to redefine the fundamental relationships of our system of government." Spokesmen for the FTC will appear at the hearings at a later time.

The American Dental Association has criticized the FTC's announced intention to seek to nullify state restrictions requiring dental hygienists to work under the supervision of dentists, which FTC calls "unnecessary limitations on the right of licensed dental hygienists to offer their traditional preventive services directly to the public." FTC says restrictions limit public's access to preventive care.

Prevention of alcohol problems in young people is the focus of an alcohol education newsletter being produced by students in a Pittsburgh high school who have completed a semester-long course taught by alcohol specialists from a local university. Following completion of the academic-credit course, some students are working on the newsletter, and others have become peer instructors on alcohol in junior high school.

"The surest way to promote a chronic problem to a national disaster is to create a Cabinet department to deal with it," says an editorial in "Business Week." The article said there is no reason to think that the addition of the Department of Education to the Cabinet will "bring any marked improvement," and warned that the department's function is to help, not to replace local districts.

Sincerely,



Patsy Silver
Managing Editor

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

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Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

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Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

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In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

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In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

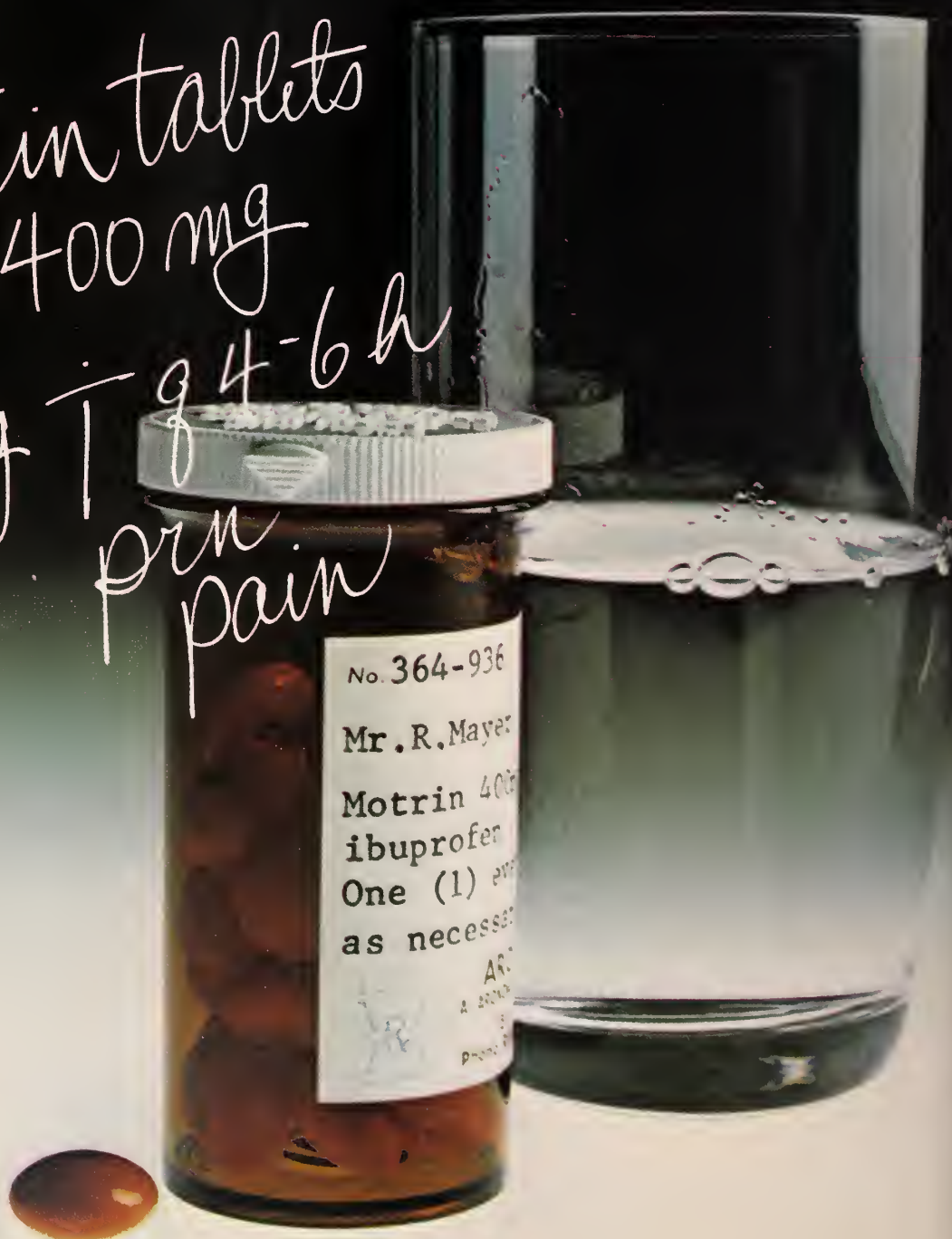
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Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

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	Darvon 65 mg propoxyphene	.66 (100)	.99 (99)	1.13 (96)	.99 (96)	.80 (96)
Statistical significance		p<0.02	p<0.01	p<0.05	p<0.02	p<0.002

*0 = No relief 1 = Partial relief 2 = Complete relief

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Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

Motrin 400^{TABLETS}mg ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

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Motrin[®] (ibuprofen)

now proved an effective analgesic for mild to moderate pain

Motrin[®] Tablets (ibuprofen, Upjohn)

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. Aspirin: used concomitantly may decrease Motrin blood levels.

Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

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San Antonio Will Host AMA's Winter Scientific Meeting

Physicians attending the 33rd Winter Scientific Meeting of the American Medical Association can select from 45 postgraduate courses, 20 symposia, numerous video clinics, CPR courses, and other special educational programs. The four-day meet is scheduled to begin Jan. 12, 1980, in San Antonio.

Symposia topics will include social drinking and chronic alcoholism, what the doctor can do to help his patients stop smoking, international terrorism and rescue, how to cope with the impaired physician, drug problems in the teenager, latest findings in treatment of cancer, health effects of exposure to radiation from the viewpoint of the practicing physician, bites and stings, hypochondriacs in the health care picture, update of plastic surgery, and obesity and what can be done about it.

Participating specialty societies are: American Academy of Dermatology, American Association for Thoracic Surgery, American College of Cardiology, American College of Physicians, American Society of Clinical Pathologists, American Society for Clinical Pharmacology and Therapeutics, College of American Pathologists, and the AMA Section Coun-

cil on Plastic, Reconstruction and Maxillofacial Surgery.

Among the program highlights are:

- Hypertension Update: 1980. Physicians will be briefed on the recommended approach to office treatment of the newly discovered patient with high blood pressure.
- Controversies in the diagnosis and management of breast cancer. The roles of surgery, radiation treatment, and use of hormones and drugs to treat breast cancer will be evaluated in terms of new approaches.
- Practical training for the physician in dealing with four common types of cancer — cancers of the breast, lung, colon and pancreas. Diagnostic techniques will be explored, and approaches aimed to determine the best course of treatment.
- Diabetes mellitus. The course is directed to the physician in general practice.
- Behavioral problems in children and adolescents.

Further information on the scientific meeting is available from the Department of Scientific Assembly, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610.

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Telephone: (601) 939-9030



DATELINE

SBH Urges
SLE Titers

Jackson, MS - The State Board of Health encourages all physicians in the state to draw both acute and convalescent titers (2-4 weeks apart) for St. Louis Encephalitis or aseptic meningitis, especially if the patient is older than 40 years. SBH reports 42 cases of SLE in the state (three confirmed, four presumptive and 35 suspected). This epidemic (the third in six years) is centered in Washington County, but cases have been reported in 11 other counties.

Cocaine Use
Increases

Rockville, MD - The 19 metric tons of cocaine smuggled into this country last year found their way to 6.5 million Americans and brought about \$1 billion in revenues for traffickers and dealers. The National Institute on Drug Abuse estimates over 10 million Americans, including one million under age 18, have used cocaine at least once. The number of 18- to 25-year-olds who had ever used increased by over 40% from 1976-77; between 1977-78, number of high school seniors who had used jumped 20%.

State Hospitals
Suffer Losses

Jackson, MS - The Mississippi Hospital Association reports that 53 hospitals in the state suffered losses totaling \$19 million last year due to treating Medicare patients and \$6 million through Medicaid reimbursements. Another \$2 million in losses was attributed to free care given to patients under the Hill-Burton law. The MHA noted that private hospital patients are subsidizing the federal health programs twice - once as taxpayers and again as paying patients.

Auxiliary Supports
Disabled Physicians

Jackson, MS - MSMA's Auxiliary is helping to furnish the halfway house for the association's Disabled Physicians Program. Auxiliary members are seeking donations of cash or furnishings for the house, which is located in Jackson and will be operated by the Caduceus Club. Programs for several recent Auxiliary meetings, including the Board meeting and fall workshop, have been conducted by Dr. Nina Moffitt, describing the activities of the Disabled Physicians Program.

FDA Annual Report
Is Released

Washington, DC - Although the total number of bills introduced into Congress has declined over the past few years, the number of bills affecting the FDA has steadily increased. According to the FDA's annual report for fiscal year 1978, the nature of these bills has changed. In the 93rd Congress, over 86% of all the bills that affected FDA dealt with regulation of products. In the 95th Congress, only 52% were product-related. The remainder were reform-related bills dealing with the operations of the agency.

Payments to Individuals From Tax Money Soars

Of the \$510 billion in federal taxes paid in fiscal 1980, approximately half will be redistributed to millions of individuals under various income security and other programs.

Some \$250.6 billion of the 1979-1980 proposed federal budget is allocated to the so-called "transfer programs" — those requiring that money be transferred from individuals who earned it to those who did not.

The Tax Foundation, a nonpartisan research organization which conducted an analysis of President Carter's new budget, points out that the focus of much of the debate about proposed federal spending restraints is the amount of outlays to individuals. They note that a reduction in total outlays is not the objective of the restraint efforts, but rather a slowing of the year-to-year growth of federal spending.

Analysts remark that the accuracy of the administration's economic assumptions, which to date "have been highly over-optimistic," will affect the proposed restraints. They note that inflation is running at a far higher rate than the administration forecast, and that the economy has turned downward. The Foundation compiled the following data on tax money redistribution to illustrate the growth of the transfer program.

FEDERAL PAYMENTS TO INDIVIDUALS
(In Billions)

Program	1970	1975	1980*
Social Security (OASDI)	\$29.7	\$ 65.3	\$115.8
Railroad retirement	1.6	3.1	4.6
Federal retirement and insurance, total	5.6	13.3	25.7
Military retired pay	2.8	6.2	11.4
Civilian programs	2.7	7.1	14.3
Unemployment assistance	3.7	14.0	13.2
Veterans benefits	6.6	12.4	13.7
Medicare and Medicaid	9.9	21.6	46.2
Housing payments	.5	2.1	5.1
Public assistance and related programs, total	5.1	17.1	26.2
Child nutrition and milk programs	.4	1.6	3.1
Food stamps	.6	4.6	6.9
Public assistance payments	4.1	5.1	7.0
Supplemental security income	—	4.8	6.3
Other	—	1.0	3.0
Total payments to individuals	\$62.7	\$148.9	\$250.6

Source: Tax Foundation.

* Administration budget.

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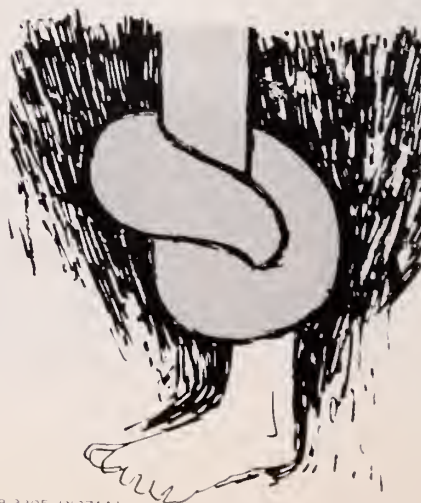
Product Information as of September, 1977
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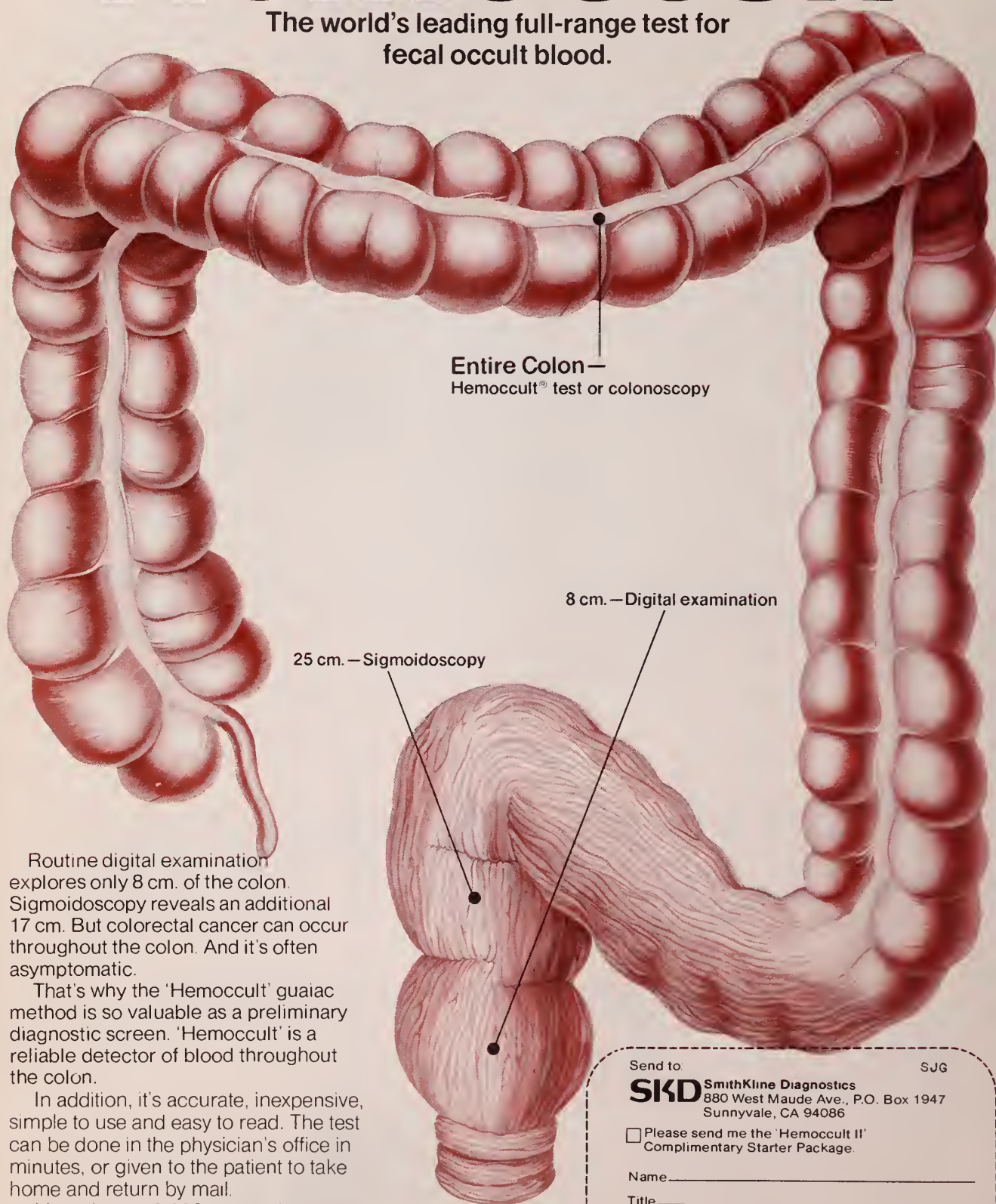
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AMA Issues New Book On Socioeconomic Issues of Health

The eighth annual edition of the American Medical Association's *Socioeconomic Issues of Health*, a reference guide for health professionals, policy makers, researchers and journalists, was released last month.

The book brings together a combination of relevant essays and current data concerning the health care delivery system. Data in this book are principally abstracted from private and government sources.

The essays cover such topics as health care in England, various aspects of health care cost containment, malpractice, continuing competence of physicians, collective bargaining in the health care industry, physician influence on health insurance plans, and an analysis of physicians in prepaid group practice.

Numerous statistical tables provide information on population, illness and death, infant and maternal mortality, characteristics of the health care delivery system, national expenditures on health care, financing mechanisms for provision of health services, and medical education and medical manpower.

These tables show that heart disease remains the leading cause of death in the United States, followed by cancer, stroke and accidents, in that order. They also show that infant deaths have been dropping steadily, from 29 per 1,000 live births in 1950 to 14 in 1977, while the total number of physicians has been climbing faster, to a total of 421,279 at the close of 1977.

Copies of the book may be purchased from: Center for Health Services Research and Development, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610. Price for single copies is \$6.00.

Radiological Society Sets Annual Meeting in Atlanta

The Radiological Society of North America has scheduled joint sessions with the American Association of Physicists in Medicine during the society's 65th Scientific Assembly and Annual Meeting, set for Nov. 25-30, at the Georgia World Congress Center in Atlanta.

For more information contact: Jean Routh, Radiological Society of North America, 1415 W. 22nd St., Oak Brook, IL 60521.

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must What you should know about the new Mississippi Drug Substitution law

As of July 1, 1979, the state legislature has dramatically changed the lawful way of prescribing drugs and of writing a prescription. Until now, writing the brand name of a drug on the prescription was enough to ensure that the

brand-name drug would indeed be dispensed. Now that no longer suffices. Unless the physician takes the necessary extra steps, for many drugs the pharmacist may substitute an "equivalent" generic drug where available.

Key points for the physician in writing prescriptions

- "Every prescription within this state ...shall be on prescription forms containing two (2) lines for the prescriber's signature."
- "In the event a prescription form which does not contain the two (2) signature lines...is utilized by the prescriber, he shall write in his own handwriting the words 'dispense as written' thereupon to prevent product selection."

Rx

dispense as written

substitution permissible

The decisions the physician must make

The physician should become acquainted with the newly mandated prescription form illustrated on the preceding page. This form requires a distinct change in the way prescriptions are written.

There are now *two* lines for the prescriber's signature. The prescription may be filled generically unless the physician signs on the line stating

"dispense as written." Special note should be made of the position of this line in the lower *left* of the prescription form rather than on the right, where the physician has customarily signed prescriptions. Only by signing on the left side can the physician be assured that the brand-name drug will be dispensed.

If the physician elects to permit substitution, this must be indicated by signing on the line marked "substitution permissible." This line is in the lower right hand corner of the prescription form.

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ORIGINAL PAPERS

Noninvasive Diagnosis of Carotid Artery Disease

J. H. HOLLEMAN, JR., M.D. and

SESHADRI RAJU, M.D.

Jackson, Mississippi

THROMBOTIC STROKE is a major cause of death and disability in the United States today. Forty per cent of patients with thrombotic stroke have a lesion confined to the extracranial circulation, and another 33% have combined intracranial and extracranial lesions.¹ Extracranial cerebrovascular disease can present as an asymptomatic bruit, as a transient ischemic attack, or as chronic cerebral dysfunction. Asymptomatic bruit has been reported in one series to progress to frank stroke in up to 19% of cases and to TIA in 27% of instances. TIA's have been shown to progress to stroke within five years in approximately 30% of patients. Carotid endarterectomy can reduce the incidence of stroke to 3%-5% in the patient with asymptomatic bruit and to 2% in the patient with TIA's.³

Patients with cervical bruits and transient focal neurological defects have a clear-cut clinical indication for carotid angiography. There is another large group of patients, however, who have asymptomatic bruits, transient focal neurological defects without a bruit, or vague nondescript neurological symptoms. In this second group of patients, reliable techniques for the noninvasive diagnosis of cerebrovascular disease can be extremely valuable. By selecting the patients in this group who are likely to have significant cerebrovascular occlusive disease, arteriography (with its risks, inconvenience, and expense) can be reserved for those patients who are likely to have demonstrable pathology. Noninvasive cere-

brovascular testing is also a useful tool for preoperative screening in individuals scheduled for major vascular or cardiac surgery and to follow the postoperative status of patients who have had carotid surgery.

Noninvasive techniques for diagnosis of carotid artery disease are applicable to a large group of patients. The authors describe certain techniques and report their advantages.

Four distinct but complimentary techniques are utilized in the cerebrovascular examination in the UMC noninvasive vascular laboratory. Each technique is based upon separate and independent phenomena related to carotid artery stenosis.

Carotid phonoangiography (see Figure 1) is the electronic recording and visualization of the morphology and timing of a carotid bruit.⁴ Bruits which extend into diastole are related to internal or common carotid stenosis, because the intracranial circulation is of relatively low resistance, and flow continues throughout the cardiac cycle. External carotid flow, however, is into a higher resistance system, and flow is almost exclusively during systole. Consequently, bruits related to the external carotid are generally confined to systole. Carotid bruits may be differentiated from transmitted murmurs, because sound related to the carotid bifurcation will be louder at the mid-neck position. False

From the Department of Surgery, University Medical Center, Jackson, MS.

Noninvasive Diagnosis/Holleman and Raju

positives occur when bruits are produced by non-stenotic tortuosity. False negatives occur because extremely high stenoses may have insufficient flow to generate an audible bruit. CPA is approximately 65% accurate, which is not sufficiently accurate to direct clinical decisions.

CAROTID PHONOANGIOGRAPHY



Figure 1. Carotid phonoangiography (CPA) shows the morphology of a carotid bruit.

Oculoplethysmography (see Figure 2) measures volume changes in the eyeball in order to detect the timing of the arrival of the systolic pressure pulse up the carotid system to the eyeball.⁴ The volume of the eyeball increases slightly during systole. This method uses two plastic cups, similar to contact lenses, to time the changes in volume of the eyeball.

OCULOPLETHYSMOGRAPHY

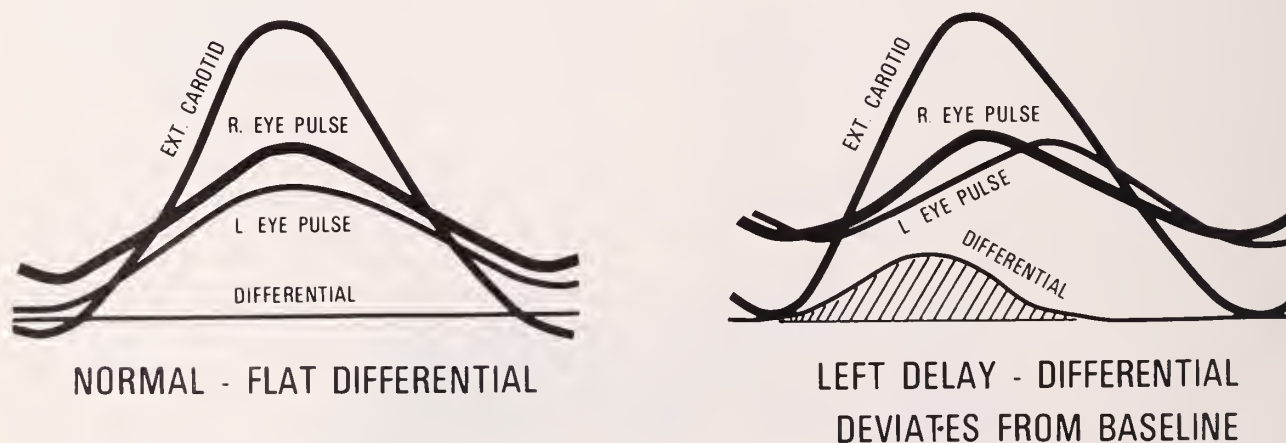


Figure 2. Oculoplethysmography (OPG) records changes in eyeball volume to time the pulse wave in each carotid artery.

A photoelectric probe on the earlobe is used to detect the pulse from the external carotid. A significant stenosis in the internal carotid causes the pulse wave to be slowed slightly. The timing of the two eye pulses, reflecting each internal carotid artery, and the earlobe pulse, reflecting the external carotid, are electronically recorded on a strip recorder. A fourth line, the differential, compares the two eye pulse signals. In the presence of unilateral internal carotid stenosis, the ipsilateral eye pulse signal will be delayed when compared to the eye pulse on the side of the normal internal carotid. Bilateral internal carotid disease will be reflected by both eye pulses occurring later than the earlobe pulse. The accuracy of OPG can be adversely affected by retinal artery disease, ophthalmic disease, poor cardiac output, or increased intracranial pressure. OPG as an independent diagnostic technique is 60% to 80% accurate.

The direction of blood flow through the periorbital collaterals (see Figure 3) is frequently altered in the presence of carotid stenosis.⁵ The distribution of flow of the internal carotid artery is almost exclusively intracranial. The ophthalmic artery, the first branch of the internal carotid, is the exception. The ophthalmic artery has collateral connections with two branches of the external carotid, the facial and superficial temporal arteries. Blood flow is ordinarily from the internal system outward to the external system. In the presence of high grade stenosis, the blood flow is reversed and flows inward.

In the examination of periorbital collaterals, the examiner places a Doppler probe over the supra-orbital artery and then alternately compresses the su-

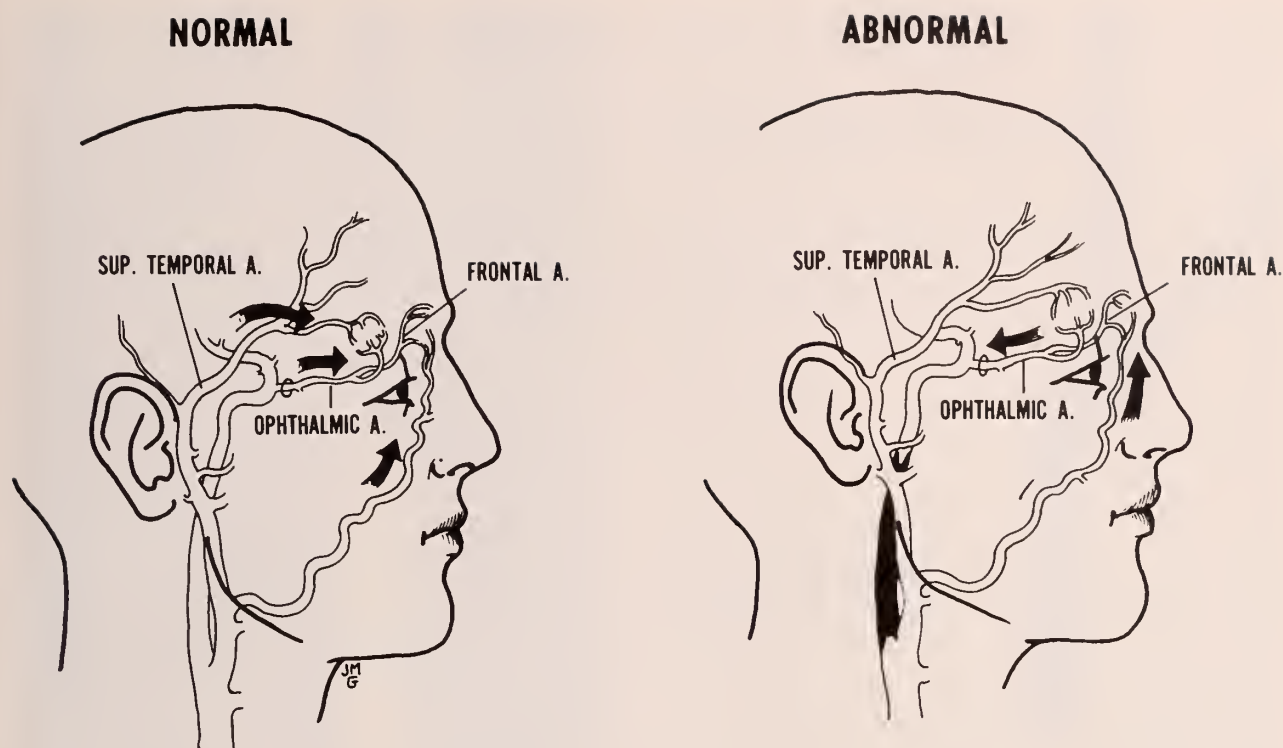


Figure 3. Periorbital collaterals are reversed with internal carotid obstruction.

perforal temporal and facial arteries. With a normal internal carotid system, the signal will increase in amplitude, because the extracranial pressure against which the outflowing blood must flow is reduced. In the presence of a significant internal carotid stenosis, compression of the superficial temporal or facial artery diminishes the signal because the flow is inward, from the external system to the internal system.

Direction of blood flow in the collaterals can also be directly monitored by placing the probe of a directional Doppler over the supraorbital artery and noting its direction of flow, and by placing the probe over the eyeball to detect the direction of flow in the ophthalmic artery. The use of these separate maneuvers to examine periorbital collateral flow significantly increases the accuracy of the method.

Reversal of the periorbital collaterals is a reliable indicator of high grade stenosis in 90% of instances when positive, but a negative examination is of little diagnostic value.

Doppler imaging and scanning of the carotid arteries uses ultrasonic waves to enable the operator to form a visual image of the extracranial carotid sys-

tem on an oscilloscope and to estimate the degree of stenosis from the velocity of the blood flow (see Figure 4). In this technique, a Doppler ultrasonic probe is traced along the course of the common, external, and internal carotid arteries. The position of the probe is electronically sensed, and an image of the common, internal, external carotid is formed. The operator then moves the probe along the courses of these arteries, while listening to the frequency of the signal. Velocity of blood flow through a stenosis is higher than velocity proximal or distal to the stenosis. Changes in velocity of blood flow are heard as higher in frequency. In this manner stenosis of the common, internal, or external carotid can be accurately located and quantitated. Lesions of the intrathoracic carotid, or of the intracranial internal carotid cannot be detected. It is, however, highly reliable in detecting lesions of the cervical carotid system.

There are two significant benefits from using various techniques which are based upon totally different physiological and physical principles. First, we are able to increase our accuracy and minimize the errors due to artifact. In those patients who have had carotid

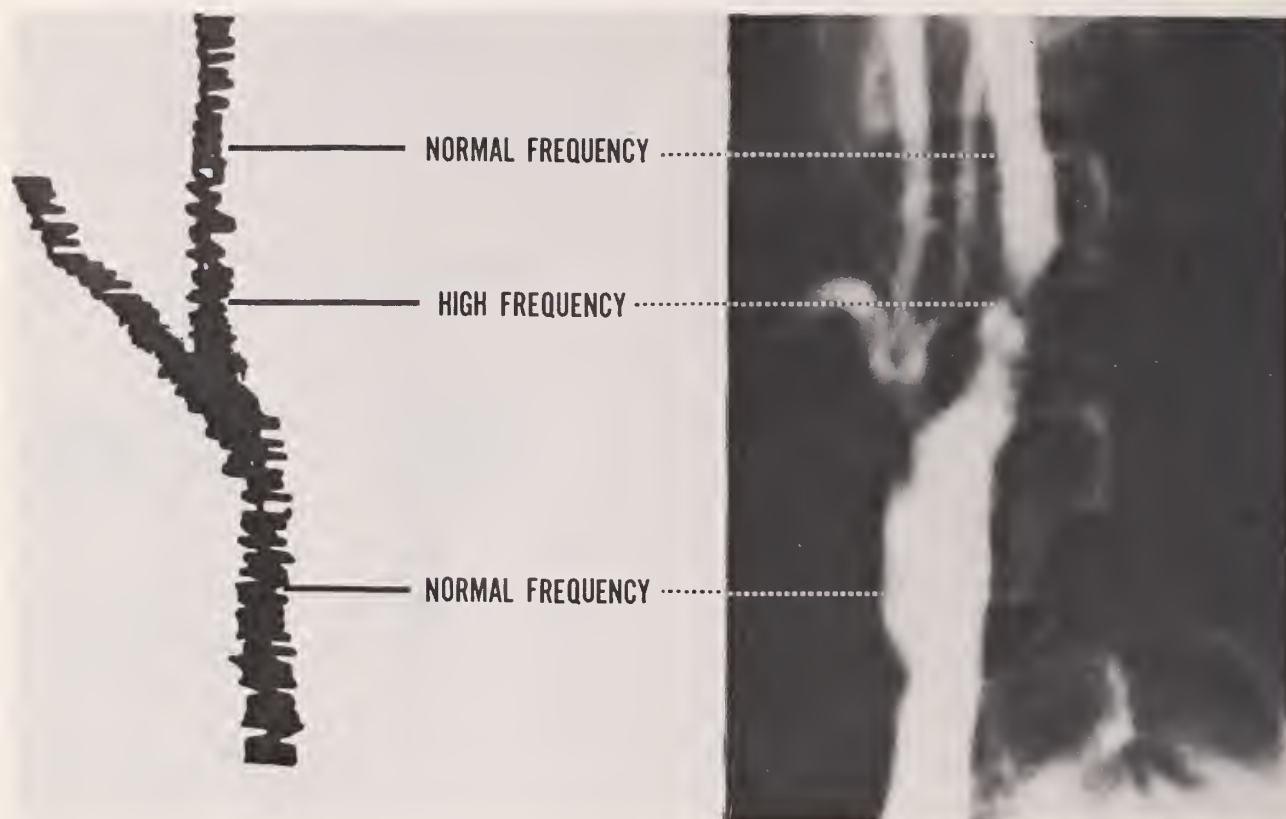


Figure 4. Dopscan image provides a guide for localization of high frequency Doppler signal associated with stenosis.

arteriography as well as noninvasive screening, we have been able to attain an overall accuracy of 93%.

Another advantage of multiple modality screening is that lesions can frequently be localized to a specific area in the carotid system. For example, a patient with a bilateral eye pulse delay and a cervical stenosis of one carotid artery probably has a contralateral carotid siphon stenosis.

Cerebrovascular atherosclerosis is a serious health problem. The noninvasive cerebrovascular examination can give important information to aid in the management of this condition. ★★★

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Transcutaneous Nerve Stimulation: Treating Pain in Athletes

TIM C. GARL, M.A., Certified Athletic Trainer
and ROBERT F. COOPER, III, M.D.
University, Mississippi

IN ATHLETICS, pain is a frequent bedfellow of the competing athlete — pain in all forms, intensities, and duration. The active athlete can be severely disabled by even the mildest pain from such common conditions as minor sprains and strains, contusions, and simple overuse syndromes. Pain which restricts the athlete's activities not only causes loss in areas of physical conditioning but may also exert psychological distress.

Transcutaneous nerve stimulation (TNS) has existed for thousands of years since the early Egyptians and Hippocrates.¹ It was not until the publication of Wall and Melzack's "Gate Theory" in 1965² that modern science and medicine redeveloped the device and applied this theoretical basis for its pain modifying abilities.

The "Gate Theory" employs the principle that a gate control system exists within the body that modulates sensory input from the skin before it evokes pain perception and pain response. Wall and Melzack proposed that the substantia gelatinosa functions as a gate control system modulating the afferent patterns before they influence the central transmission cells. Wall and Sweet³ went on to use TNS to attempt to prove this theory. They studied the effects of cutaneous stimulation upon pain and found that a mild tingling sensation interfered with the perception of pain. Wall and Melzack also noted that stimulation only affected the large-diameter fibers because these fibers have the lowest electrical threshold. Only the largest diameter nerves were stimulated, because no motor movement was produced. Since the first publishing of the "Gate

Theory," Wall and Melzack have twice restated the theory, citing fourteen years of research as a guide for changes and new discoveries.^{4, 5}

The problem of the management of pain in athletics has long been a major concern of trainers and physicians involved in sports medicine. The University of Mississippi's sports medicine staff conducted a study of the effectiveness of transcutaneous nerve stimulators in the treatment of injuries suffered by twenty athletes. The authors describe their findings and conclude that transcutaneous nerve stimulation was an effective adjunctive therapy.

The stimulating device used in this study was the Neuromod Model 3722 dual channel TNS system (Medtronic Inc.). The system is a portable one, measuring 7.11 cm long and 2.41 cm thick. It has adjustable controls for intensity and pulsation. The device is operated by three AA batteries. The stimulator specifications are as follows: pulse amplitude adjustable from 0 to 112 ± 8 mA positive peak per channel (500 ohm load); pulse rate adjustable from 3.5 ± 1.0 to 100 ± 5.0 pulses per second per channel (500 ohm load); pulse width fixed at 130 μ S minimum at 80 ± 5 mA per channel (500 ohm load). The unit weighs 150 grams without batteries.

Methods

The transcutaneous nerve stimulator has been proven^{6, 7, 8, 9} to be effective in the managing of acute pain of traumatic origin, as often seen in athletics. This led the University of Mississippi's sports medicine staff to begin using TNS for the manage-

From the Department of Intercollegiate Athletics, University of Mississippi, University, MS.

ment of some athletic injuries. The device was first employed in the spring of 1978, and produced high positive results.

Transcutaneous nerve stimulation was used on a wide variety of injuries during the 1978 fall sports season. To determine the effectiveness of the modality, and to help determine the most effective parameters of stimulation, careful monitoring was implemented in each treatment.

Twenty injured athletes were treated with the device. The sites of electrode application, duration, amplitude, and pulse rate were all recorded.

The results were recorded as one of three categories: (1) excellent, in which the treatment resulted in an increased range of motion in the injured area, allowed the athlete to continue usual, or slightly modified activity, and in which there was no

request for any pain medication; (2) good, in which there was an increase in range of motion, increase in amount of physical activity within limitations of the injury, and the ability to sleep more comfortably; and (3) poor, in which there was no decrease in pain, no increase in activity, or TNS irritated the existing pain.

In treating all injuries the staff has established a standard for duration of recovery from each injury. In a positive result of treatment, it was felt by the researchers that TNS helped to speed up recovery time by modifying the pain. The results are illustrated in Table I.

Because of the difficulty of measuring pain and the lack of a standard to measure it against, the data were established by results of a pre- and post-treatment range of passive movement measurement,

TABLE I

<i>Injured Area</i>	<i>No. of Treatments</i>	<i>Avg. Time of Each Treatment</i>	<i>Nerves Stimulated Over</i>	<i>Results</i>		
				<i>Excel.</i>	<i>Good</i>	<i>Poor</i>
Plantar fascia ligament	5	3 hrs.	Medial plantar saphenous, superficial peroneal	X		
Acromioclavicular joint	3	13 hrs.	Lateral cord of brachial plexus, supraclavicular	X		
Metacarpal — Phalangeal of the thumb	1	20 min.	Median, superficial branch of the radial nerve, lateral cutaneous of forearm	X		
Medial meniscus	3	30 min.	Local around medial side of knee, sciatic, lumbar and sacral vertebra			X
Rotator cuff of shoulder	2	4 hrs.	Lateral cord of brachial plexus, supraclavicular		X	
Medial meniscus	2	30 min.	Medial cutaneous of thigh, lateral cutaneous of calf, sciatic			X
Spondylolisthesis	2	3 hrs.	Area around fifth lumbar vertebra		X	
Brachial	2	30 min.	Brachial plexus			X
Spondylolisthesis	1	4 hrs.	Area around fifth lumbar vertebra		X	
Lateral collateral ligaments of ankle	2	7.5 hrs.	Sural, superficial peroneal, deep peroneal	X		
Gastrocnemius	3	2 hrs.	Saphenous, superficial peroneal		X	
Rotator cuff of shoulder	2	3 hrs.	Brachial plexus, axillary, suprascapular		X	
Anterior cruciate	1	2 hrs.	Saphenous, sciatic		X	
Fifth lumbar vertebra	3	30 min.	Area of third, fourth, and fifth lumbar vertebra			X
Lateral collateral ligaments of the ankle	2	10 hrs.	Saphenous, superficial peroneal, deep peroneal	X		
DIP joint long finger	3	2.5 hrs.	Flexor carpi ulnaris, median, ulnar		X	
Vastus lateralis	3	2.5 hrs.	Lateral cutaneous, medial and intermediate nerve of thigh		X	
Vastus lateralis	4	4 hrs.	Lateral cutaneous, medial and intermediate cutaneous of thigh		X	
Patella	3	3 hrs.	General patella area, sciatic, medial, intermediate cutaneous of leg			X
Epicondyl humerus	4	3 hrs.	General area around elbow		X	

and by a subjective evaluation of physical activity performance by the injured athlete as well as by verbal response to specific questions about the pain sensation and intensity. All data were treated objectively by the researchers.

Summary

It is important to realize that when treating a college athlete, one is dealing with a student athlete. This indicates the need for the patient to be able to remain alert, which is not a characteristic of most oral analgesics. This is a definite asset of TNS therapy since it has no sedative effects. Side effects of TNS are: contraindication in stimulation over the carotid sinuses, interference with cardiac pacemakers, allergic reactions to electrodes and adhesive tape. It is also contraindicated for use on patients with advanced heart disease. These conditions are, of course, very rarely seen in college athletes.

The ability to provide the injured athlete some increase in activity due to pain modification makes TNS treatment a valuable pain management modality. It is important to note that TNS treatment, as far as is known, is a symptomatic treatment, and as such may suppress the progress of pain which would otherwise serve as a protective influence on the outcome of a disease process.¹⁰

TNS does not necessarily allow the athlete to continue to participate. It is used to allow the athlete to increase activity within the limitations of the injury, and may allow the athlete to recover more

quickly. It is also worth noting that TNS does not anesthetize the area completely as would, for instance, a lidocaine injection. It does, however, modify the intensity of the pain sensation.

Comment

Transcutaneous nerve stimulation is not a magical device for killing pain; it will not be effective on every patient. It is simply an alternative to drug therapy and the resultant effects that may be harmful to the athlete's physical and mental well-being.

★★★

University, MS (38677)

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Radiologic Seminar CXCVI: Ultrasound B-scanning of the Poorly Visualized Kidney

KENNETH G. CARTER, M.D.

Jackson, Mississippi

EXCRETORY UROGRAPHY is the most commonly used procedure to visualize the urinary tract and evaluate the anatomy of the kidneys. However, optimal visualization of the renal parenchyma and pelvicalyceal systems by intravenous urography requires that contrast reach the kidneys via the renal arteries and be cleared within the kidneys by glomerular filtration. With disease, there may be alteration in the appearance of the nephrogram or pyelogram where visualization is so poor that diagnostic information is uncertain. Ultrasound

Sponsored by The Mississippi Radiological Society.
From the Department of Radiology, Mississippi Baptist Medical Center, Jackson, MS.

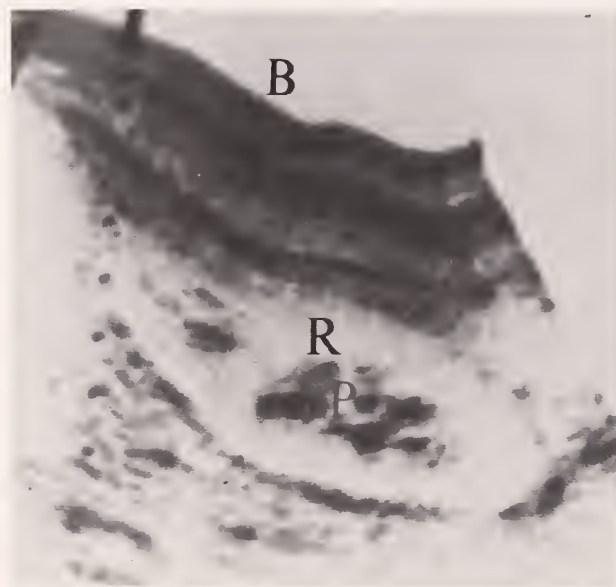


Figure 1. Longitudinal scan through the right kidney with the patient in prone position shows a normal renal outline with a compact central pelvicalyceal echo pattern. Patient's head is to the left, feet to the right. R = renal parenchyma; P = pelvicalyceal echo pattern; B = surface of the patient's back; dot scale at the upper pole of the kidney, 1 cm between the dots.

B-scanning can be a valuable examination in this situation, as it is not dependent upon renal function nor opacification by contrast material.

The ultrasonic visualization of the kidneys is based solely upon acoustical differences between the renal capsule, renal parenchyma, pelvicalyceal system, and surrounding soft tissues. A sonogram of the normal kidney shows a smooth contour with a compact central pelvicalyceal echo pattern (see Figure 1). Newer ultrasound scanners are capable of demonstrating cortex, medulla, and arcuate vessels. With hydronephrosis, the pelvicalyceal echo pattern is altered with splaying of the normally compact echo pattern, increased central sonolucency and enhanced through transmission (see Figure 2). Renal sonography is quite valuable in confirming or denying hydronephrosis, whether or not there has been a previous intravenous urogram. Several cases will be

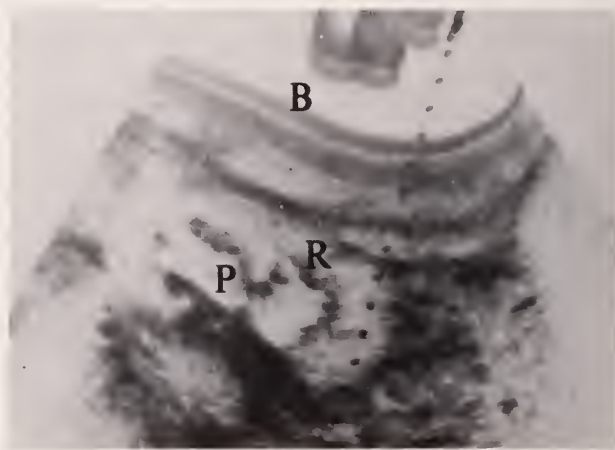


Figure 2. Longitudinal scan through the left kidney with the patient prone shows alteration of the central pelvicalyceal echo pattern with central sonolucency indicating fluid distending the pelvicalyceal system, moderate hydronephrosis. R = renal parenchyma; P = dilated pelvicalyceal system; B = surface of the patient's back. Patient's head is to the left, feet to the right.

discussed which demonstrate the usefulness of ultrasound in evaluating renal anatomy.

Case 1

A 21-year-old female underwent extensive pelvic surgery for GYN malignancy. Postoperatively, urinary output ceased and there was suspicion of bilateral ureteral obstruction related to the pelvic cancer surgery. Temporary percutaneous nephrostomy was anticipated. However, ultrasound examination showed normal sized kidneys and normal pelvicalyceal echo patterns (as in Figure 1), not the appearance of ureteral obstruction with hydronephrosis. Subsequently, acute tubular necrosis was confirmed.

Case 2

A 5-year-old boy was admitted with right flank pain, fever, and pneumonia. Intravenous urogram showed a faintly visualizing right kidney which appeared enlarged with a non-homogeneous persistent nephrogram. Also, a defect in the bladder was seen, suggesting an ectopic ureterocele. Severe pyelonephritis with possible abscess secondary to obstructed, duplicated collecting system was suspected, but the patient did not respond to antibiotics. Ultrasound examination disclosed a bulging mass at the upper pole of the kidney, completely replacing the normal echo texture of the kidney, and replacing the pelvicalyceal echo pattern (see Figure 3). There was no evidence of hydronephrosis. This appearance suggested neoplasm, and surgery subsequently disclosed a large Wilms' tumor.

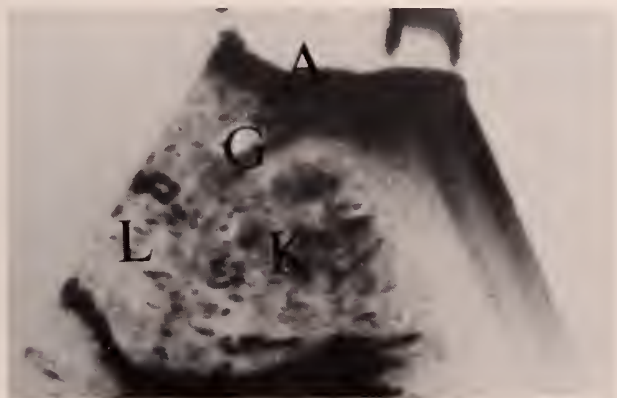


Figure 3. Longitudinal scan through the right kidney with the patient supine shows enlargement of the upper pole of the kidney with increased echogenicity and lack of a normal compact central pelvicalyceal echo pattern. The kidney is causing pressure effect on the adjacent liver. K = enlarged, abnormal kidney; L = liver; G = gallbladder; A = anterior surface of the upper right abdomen. Patient's head is to the left, feet to the right.

Case 3

A 73-year-old female was referred for treatment of carcinoma of the cervix. The previous intravenous urogram had shown no visualization of the right pelvicalyceal system on intravenous urography. Ultrasound examination showed the entire right kidney to be essentially a fluid-filled structure with marked sonolucency and enhanced through transmission, the appearance of gross hydronephrosis (see Figure 4).



Figure 4. Longitudinal scan through the right kidney with the patient supine shows the right kidney to be abnormal with a grossly distended pelvicalyceal central echo pattern and no appreciable renal parenchyma. This appearance suggests long standing obstruction with severe renal atrophy. P = grossly dilated pelvicalyceal system; D = diaphragm; L = liver; A = anterior surface of the right upper abdominal wall. Patient's head is to the left, feet to the right.

Case 4

A 50-year-old male presented with severe right side abdominal pain. The pain was of such severity that exploratory laparotomy was done. However, no cause for the pain was found, and subsequent intravenous urography showed a persistent right nephrogram, suggesting obstruction due to ureteral stone. Retrograde study could not be accomplished due to prostate enlargement. Ultrasound examination showed enlargement of the upper pole of the right kidney with low-level echo production, characteristic of a solid lesion. The visualized pelvicalyceal echo pattern in the lower pole of the kidney was normal, not the appearance of urinary tract obstruction (see Figure 5). Arteriography sub-

sequently disclosed a renal cell carcinoma replacing the upper pole of the kidney. Apparently, bleeding into the neoplasm had prompted the severe abdominal pain.



Figure 5. Longitudinal scan through the right kidney with the patient prone shows localized enlargement at the upper pole of the right kidney with low level echo production throughout. The only visualized pelvicalyceal echo pattern is in the lower pole. M = renal mass, solid; B = posterior surface of the patient's back. Patient's head is to the left, feet to the right.

Ultrasound B-scanning is a simple, rapid, and inexpensive method of evaluating the kidneys. Most commonly, ultrasound is used to confirm or deny cystic lesions in the kidneys. However, when visualization of the kidneys by intravenous urography is not satisfactory and diagnosis is uncertain, renal ultrasound B-scanning can provide important information as to the anatomic details of the kidneys even if the patient is in renal failure. Renal size, shape, and presence or absence of hydronephrosis usually can be easily determined. Frequently, this is of critical importance in management of the patient's disease process. ★★★

1225 North State St. (39201)

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Mississippi State Medical Association Auxiliary

1979 Membership Campaign

Dear Doctor:

Have you ever wondered what your spouse does with his or her time? Physicians' spouses are busy, active people. Being married to a physician provides one with the unique opportunity to become involved in health related services in our state and nation. Is your spouse a member of the Mississippi State Medical Association Auxiliary and the American Medical Association Auxiliary? Are you a member of MSMA and AMA? Don't deprive your spouse of the opportunity to give some of her time to this volunteer organization called medical auxiliary. Your spouse can not belong unless you are a member.

MSMA and AMA auxiliaries are the only organizations in which doctors' spouses can assist the medical profession in its program for the advancement of medicine and the betterment of public health. We provide health education programs, search out health needs, encourage good health legislation, raise money for AMA-ERF, work together to improve the doctors' image in their communities and help to foster favorable public sentiment.

We are proud to be married to physicians. Our membership proclaims this. A strong auxiliary can benefit your organization as well as ours.

We must be concerned about the welfare of medicine *now*. Yesterday you practiced medicine in a free and independent manner; today you practice with restrictions and liability pressures; tomorrow you may practice with total government control.

You and the future of medicine are very important to us. We are ready to offer our help and support. Help us grow stronger by paying your spouse's dues when you pay your dues. State dues are \$5.00 and national dues are \$7.00.

We can do more together.

★★★

MRS. JOHN M. ESTESS
1st Vice-President, MSMA Auxiliary
Membership Chairman



The President Speaking



Cost Containment — Voluntary Effort or Mandatory?

GERALD P. GABLE, M.D.
Hattiesburg, Mississippi

We are all aware of how much criticism we as physicians and hospitals have received from our patients and our politicians in regard to the cost of medical care today. Both physicians and hospitals have been blamed for the problem. To get a proper perspective, we physicians should analyze the true causes and try to arrive at some solutions.

We are all cognizant of the largest cause of the problem — inflation. Inflation alone accounted for 53% of the increase in national health care expenditures between 1965 and 1975, and for 75% of the increase since 1974. We are all personally familiar with the increases in rent, utilities, medical supplies, nurses' and receptionists' salaries, secretaries' salaries, and postage, which doubled the cost of typical office overhead from 1969 to 1976, and which have continued to spiral since 1976.

The rapid expansion of federal government programs has contributed significantly to the increase of the cost of medical care. In the ten years from 1965 to 1975, the combined cost of Medicaid and Medicare soared from \$362 million to \$28 billion due to increased utilization, increased benefits, increased eligibility and enrollment, coupled with fraud and administrative inefficiency. The cost of complying with government regulations is roughly 25% of hospital expenditures. The increase in minimum wage laws passed by the federal government accounts for 37% of the increase in hospital cost. Advances in technology have greatly increased medical care costs, but have increased life expectancy from 63 to 72½ years since 1940. Increases in malpractice insurance rates, demands by patients for more and better care, and the practice of defensive medicine have all contributed to increased costs. Life style habits of obesity, excessive smoking, excessive alcohol consumption and "drug culture" habits have all contributed to increased cost.

What then can we as physicians do to support a voluntary effort to reduce medical care costs before it is mandated by Congress? First, we can make ourselves aware of the costs of some of the procedures, tests and medicines which we order for our patients. Most physicians have little true knowledge of the cost of hospital rooms, medications (parenteral versus oral), CT scans, nuclear scans, diagnostic x-rays and laboratory procedures which they order for their hospital patients. Ask to see copies of some of your patients' hospital bills so you can familiarize yourself with some of the costs. Continue to discourage unnecessary hospitalization just because the patient wants to go into the hospital to have a checkup because "my insurance will pay for it." Continue to encourage office examinations and testing where appropriate and preadmission testing where possible, without duplicating these tests following hospital admission. Encourage your patients to see you in the office for routine care instead of going to the emergency room for nonemergency conditions (where the cost is usually twice the amount of an office visit). Patients requiring intensive care services should be moved out of these units as soon as it can safely be done, and all patients should be discharged from the hospital for the same reason and not be allowed to stay an extra day "because it isn't convenient for the family to pick me up that day."

There are many other things that we can do with proper planning and thought to help hold down costs. It is imperative that we do so; because if we don't, the chairman of the House Ways and Means Subcommittee on Health has already warned that mandatory fee and cost control figures are in the computer ready to be implemented. Doctor be warned!

EDITORIALS

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

VOLUME XX, Number 11

NOVEMBER 1979

Our Technology — Is It Affordable?

We can't afford our technology!

Health care costs are of increasing concern to all parties involved. The problems are recognized and often discussed. The solutions are not so easily found.

Each day brings new breakthroughs in technology, the cost of which may well not be affordable. When we realize that in the near future 30% of our population will be over 65, who for the most part are nonproductive, we wonder if society can pay for the reconstructive procedures that today are considered commonplace.

It is recognized that 50% of health care costs are incurred during the last three months of life. This fact should tell us something.

While putting a dollar value on life is unheard of in our society, somewhere we will have to begin to consider who can be salvaged at an affordable cost.

W. MONCURE DABNEY, M.D.

Editor

Crystal Springs, MS

LETTERS

SIRS: I read with great interest the article on "Attitudes of Mississippi Physicians Towards Nurse Practitioners" in the September issue. The authors are to be congratulated in pointing out the marked differences in attitude that physicians have towards nonmedical personnel being involved in any aspect of the practice of medicine. This is clearly exemplified by the fact that approximately 5% of the physicians felt a nurse practitioner was incapable of collecting urine appropriately, to the other extreme where 8.5% felt they could manage a serious problem like "abdominal pain with distention."

The fact is that neither of these groups is correct, and these figures reflect primarily attitudes of a subjective nature. This is most unfortunate.

Of the studies undertaken to date, and there have been several, the vast majority indicate that a nurse practitioner can function equal to the physician in certain well defined roles. It is also important to note that patient acceptance of the nurse practitioner is equal to that of the physician.

It seems that we either believe on the basis of evidence available that there is a role for these physician assistants, or else studies should be undertaken to show that the previous studies are, in fact, unsound and ill conceived. Unfortunately, these studies of a "social nature" don't lend themselves well to the minute dissection that one is able to undertake in the more research oriented literature. Many physicians thus doubt the conclusions and their relevance in the practice of medicine. This is an attitude that is difficult to measure, but I am sure has great influence on the figures presented in the article.

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University Medical Center

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Jackson, MS 39216

(Ed. Note: Unless physicians show a willingness to live in less populated areas, a trend not apparent at this time or anticipated, nurse practitioners or their equivalent will likely fill this void. — W.M.D.)

SIRS: I noted with interest your report on the establishment of a stroke service at the Mississippi Baptist Medical Center as it appeared in your August 1979 edition. Stroke is a problem so large as to cost the U. S. taxpayer . . . close to \$7 billion a year, kills one person in six and leads to more permanent unemployable disability than any other affliction. The addition of a stroke unit at the Baptist, to comple-

LETTERS/Continued

ment the one at the University Hospital is good news for Mississippi!

I am particularly pleased that you were able to make mention of the fact that the Baptist Medical Center has joined our multi-centered collaborative study. Dr. Douglas Stringer will be participating at the Baptist Center in this multi-national effort and we are delighted to welcome him to the study. The Baptist Medical Center group . . . will be the latest team who have joined the international collaborative study which has been set up to determine whether or not superficial temporal to middle cerebral artery bypass procedures are effective in preventing stroke. Dr. Robert Smith and Dr. Armin Haerer at the University of Mississippi Medical Center have been important contributors to the study, will continue as an important center and they, too, welcome the addition of a new Jackson group. There are just a few cities in the world, of the size of Jackson, where there are two expert teams involved in this revascularization project and we congratulate the medical community in Jackson on this account.

We are carrying out this study in 21 states of the union, in 3 provinces of Canada, in 10 countries in Europe and in 8 university centers in Japan. We have had to cast our net widely so that we can include most of the surgeons in the world who have expertise in this delicate type of surgery and who are associated with neurological colleagues prepared to follow carefully these patients for a five-year period. The kind of cases that are required are those who have had transient ischemic attacks or a partial but not a complete stroke. Then they must have x-rays indicating that they have stenosis of the carotid artery high in the neck or inside the head so that it is not accessible to ordinary surgical maneuvers, or must have carotid artery occlusion or have stenosis or occlusion of the middle cerebral artery. All these have to be appropriate to the symptoms. All patients are followed at three-month intervals and are to be given the best known medical care including antihypertensive therapy, any cardiac supportive measures that may be or become indicated and platelet-inhibiting drugs. In addition, one-half of the patients will receive the operation and the other half will not. The hope . . . is that we can establish firm indications for this new and exciting operation. It is hoped that it can be accredited before it is done so universally with unproven indications that we will be able to avoid the dilemma which plagues physicians and surgeons about the indications for coronary bypass procedure.

We thank most warmly the physicians and surgeons of the State of Mississippi for their cooperative spirit in respect to this study.

H. J. M. BARNETT, M.D.
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EC/IC Bypass Study
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N6A 5A5

Medico-Legal Brief

Pharmacy Liable for Dispensing Estrogen Instead of Drug for Circulation

A pharmacy was liable to a patient for \$135,000 in damages for erroneously dispensing estrogen instead of a drug for circulation problems, the Mississippi Supreme Court ruled.

The patient had circulatory problems with his legs due to a World War II frostbite injury. In 1970, he underwent an operation that severed nerves leading to the blood vessels of the legs, but that procedure did not relieve the pain he was having. In June 1974, a neurologist prescribed two drugs to improve his circulation. The pharmacy dispensed Estratab, an estrogen product, instead of Ethatab, which was prescribed by the neurologist.

The mistake went unnoticed for almost a year, during which the patient's breasts became enlarged, he suffered continuous nausea, physical and mental fatigue, loss of memory and impotence. He continued to have pain in his legs, and he began seeing a psychiatrist because of his impotence. The entire situation caused deterioration of his family life and his relationship with his wife. In a suit against the pharmacy a jury awarded him \$135,000.

Affirming the decision, the Mississippi Supreme Court said that the trial court did not err in charging the jury to return a verdict for the patient. It was undisputed that the pharmacist who dispensed the drug did not use the required degree of care in filling the prescription. There was no evidence that the patient was negligent in not discovering the mistake earlier, the court said. Although the award of \$135,000 was large, the pharmacist's mistake resulted in severe damage to the patient, the court said. His psychiatrist testified that treatment would continue for another year or two after the trial. —*French Drug Company, Inc. v. Jones*, 367 So.2d 431 (Miss. Sup. Ct., Nov. 8, 1978)

MEDICAL ORGANIZATION

Dr. Atkinson Victim Of Train-Car Crash

Dr. Jack A. Atkinson, 1975-76 MSMA president, was killed in a train-car collision in the Brookhaven area on Sept. 22.

"Dr. Jack," as he was fondly known to his patients in Brookhaven and to his many friends throughout Mississippi, was an outstanding medical and community leader.

Prior to becoming MSMA president he served on numerous association committees and as chairman of the Council on Medical Service and Committee on Peer Review. More recently he served on the Board of Directors of the Mississippi Foundation for Medical Care and as chairman of MSMA's Committee to Study Health Needs in Mississippi. This summer he was appointed by the Chief Justice of the Mississippi Supreme Court, Judge Neville Patterson, to the newly created Mississippi Health Care Commission and was subsequently elected chairman of the Commission by its other members.

A front page story in his hometown newspaper, the *Brookhaven Daily Leader*, perhaps said it best about "Dr. Jack's" life. It read in part — "It has been many years since the death of an individual has touched as many lives, people from every walk of life, as that of Dr. Jack Allen Atkinson. . . . Dr. Atkinson, known simply as 'Dr. Jack' to his countless patients over the years and numerous friends, was held in the highest regard by fellow members of the medical profession and by everyone who had the privilege of knowing him. His practice of medicine combined faith, superb ability, compassion, time and accessibility for his patients — traits that not only were regarded as the ingredients of an excellent physician but factors that contributed to patients knowing they had a good friend as well. . . ."

UMC Seeks \$102 Million

The University of Mississippi Medical Center is seeking a \$102 million budget for fiscal year 1980-81 operations.

Appearing recently before the Commission on Budget and Accounting, UMC officials requested approval of the \$102 million in operational funds to include state appropriations totalling over \$45 million, a \$13.1 million increase over the current fiscal year.

UMC programs, where the largest increases in state funds are projected, include funding for a new Statewide Medical Examiner's Program and increases in funding for the UMC Hospital and School of Medicine.

The Statewide Medical Examiner's Program will require \$1.9 million in state funds. Dr. Faye Spruill, director of the program, stated that the funds would be used to improve coroner investigations of deaths caused by homicide, accident, suicide, and unexplained causes.

The UMC School of Medicine will require \$18.7 million in state funds, \$4.0 million more than this year. Planned enrollment for fiscal year 1980-81 is 600 medical students, 50 graduate students, and 126 interns and residents. Speaking for the medical school increase, UMC Vice Chancellor, Dr. Norman C. Nelson, told the Budget Commission that 68% of the school's graduates were practicing in Mississippi and that he expected the state's physician shortage to end by the late 1980's.

Other program requirements for state funds were as follows: UMC Hospital, \$15.5 million; UMC School of Dentistry, \$5.6 million; UMC School of Nursing, \$2.0 million; UMC School of Health Related Professions, \$1.4 million.

MSMA Announces 1980 Health Legislation Proposals

The Mississippi State Medical Association expects to be active in the 1980 legislative session, seeking enactment of the association's recommendations for health legislation. The proposals, resulting from studies undertaken by official committees and from action by the House of Delegates, cover seven major areas of need in public health.

MSMA recommends legislation to establish a planned, sequential program of health education for students in grades 1-12. The association's suggested program would be conducted by qualified personnel and follow a curriculum appropriate for the age and maturity of the children at each grade level. The association believes that health education is one of the best preventive medicine tools available, and that reductions in teenage pregnancies and drug abuse would be probable benefits of improved school health education.

MSMA supports legislation to place a tax on cig-

ORGANIZATION / Continued

arettes and cigars to fund hypertension and cancer control programs conducted by the State Board of Health. This recommendation is made in recognition of the fact that smoking is a prime cause of two of the leading causes of morbidity and mortality in our state — hypertension and cancer.

If another of MSMA's recommendations is adopted by the 1980 legislature, the state's implied consent law for driving while intoxicated will be lowered from its present .15% blood alcohol consumption to .10%; also, re-examination for driver's licenses would be required every five years for those under 65 years of age, and every two years for those over 65. A reduction in the number of motor vehicle-related deaths and injuries would be expected as a result of this legislation.

Adequate funding for existing programs at the Mississippi State Board of Health for immunization, tuberculosis control and venereal disease control would be implemented if another MSMA-supported legislative proposal is enacted.

The association supports legislation to fund a statewide medical examiner's system, complementing and improving the present county system for investigation of deaths.

The association also supports legislation to provide funds for public education and assistance to local communities in installing fluoridation programs as a means to reduce the incidence of dental caries, a major health problem in the state.

MSMA supports legislation to give statutory recognition of "brain death," a measure which would facilitate organ removal and transplantation where medically indicated and approved.

Additionally, MSMA recommends passage of legislation to: fund the Statewide Genetic Screening Program for Children enacted by the 1978 legislature; increase the ceiling on insurance coverage of emergency transportation for newborns; increase the State Hospital Commission's per diem for charity patients in community hospitals to at least the lowest per diem of the state's charity hospitals; and reduce the retention time for x-rays in hospitals.

**112th Annual Session
April 27-May 1, 1980
Mark Your Calendars Now!**

MPHA Convention Program Will Feature "Superhealth '79"

A presentation called "Superhealth '79" will highlight the opening meeting of the Mississippi Public Health Association's annual convention, set for Dec. 4-6 at the Holiday Inn Downtown in Jackson. Dr. Alan Blum of Florida, and Dr. John W. Richards, Jr., of South Carolina, will conduct the program which focuses on the question, "Prevention — have we really heard it all before?" The program was presented at the American Medical Association convention in Chicago in July.

Workshops planned for the second day of the MPHA convention will explore the topics of communications, assertiveness training, conflict resolution, legal liabilities in health care delivery, pesticide-environmental hazards, role development and time management.

Thursday's general session will focus on the development of legislative ideas. Panel participants will include elected officials and lobbyists. Special events planned for the three-day meet include a luncheon, president's reception and a dance.

More information about the session is available from MPHA, which is currently conducting its 1979-80 membership drive. The organization, open to all people professionally engaged in or with a serious interest in public health work, seeks to provide statewide coordination of public health efforts. Dues for active membership are \$8.00 per year, payable to MPHA, P.O. Box 1700, Jackson, MS 39205.

NIH Awards Cardiology Grant to UMC

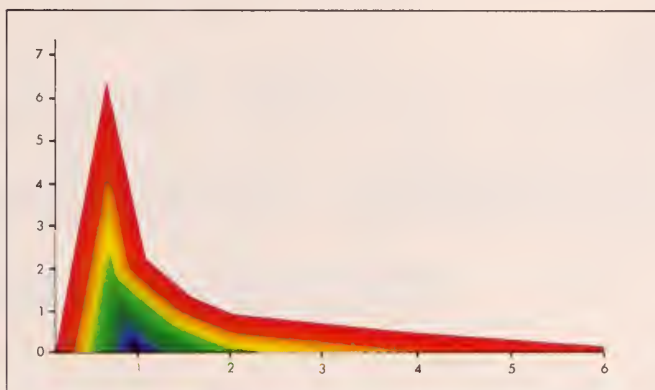
Dr. Richard Hutchinson, University of Mississippi Medical Center associate professor of medicine, has received a \$300,000 career development award in preventive cardiology from the National Institutes of Health.

A total of seven awards were given nationwide, the first of their kind from NIH.

Grant funds will be used to incorporate courses on preventive cardiology into the medical school curriculum.

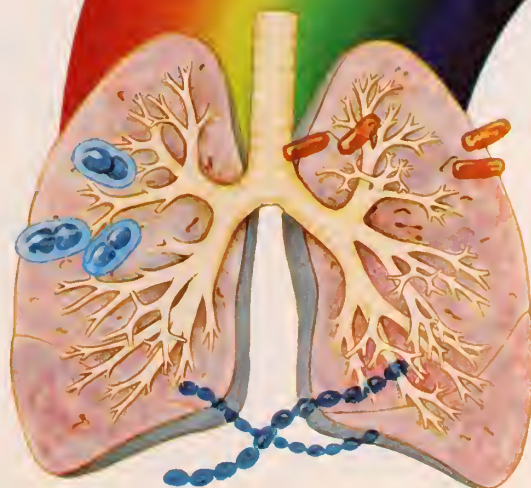
Since 1974 Dr. Hutchinson has directed the local phase of the Aspirin Myocardial Infarction Study funded by the National Heart and Lung Institute. The five-year research project was designed to provide conclusive data on whether or not aspirin is effective in preventing a recurrent heart attack.

more
than just spectrum



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**Efficacy
proven in the
treatment of
bronchitis,
pneumonia,
upper respiratory
tract infections
and otitis media*
with fewer
side effects.**



*Due to susceptible organisms
(See important information on last page.)

New **CYCLAPEN**[®] (cyclacillin) Tablets/ Suspension

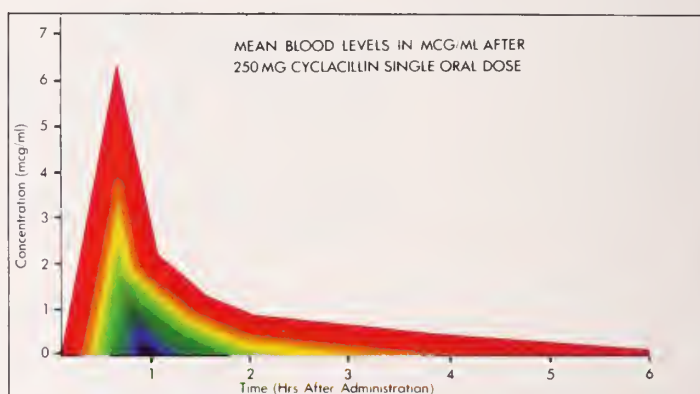
efficacy with fewer side ampicillin confirmed in studies of 2,581

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absorption from GI tract

Rapid onset of action—
mean peak serum levels
within 30 minutes

Exceptionally high peak
blood levels—3 times
greater than ampicillin
(clinical efficacy may not
always correlate with
blood levels)

Rapidly excreted
unchanged in the urine—
1½ times faster than
ampicillin



High cure rate with CYCLAPEN [®]		
Causative Organism	Bronchitis/Pneumonia [†]	No. of Patients
<i>S. pneumoniae</i>	100	73
	95	
Chronic Bronchitis [†] (acute exacerbation)		
<i>H. influenzae</i>	92	12
	Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to <i>H. influenzae</i>	
Streptococcal Sore Throat [†]		
Group A beta-hemolytic Streptococcus	100	44
	86	
<div><div></div> % Clinical Response</div> <div><div></div> % Bacterial Eradication</div>		

**more than just spectrum
in bronchitis, pneumonia
and upper respiratory
tract infections[†]**

*Includes all patients treated. 2,415 evaluated for safety;
1,819 evaluated for efficacy.

[†]Due to susceptible organisms.

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effects than double-blind patients*

Fewer side effects with CYCLAPEN® in
double-blind studies to date^{1,2}

Total number of drug-related side effects in all patients	
CYCLAPEN®	128 of 1,286 (10%) of patients
ampicillin	202 of 1,129 (18%) of patients
Difference statistically significant ($P < 0.001$)	

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Effective for bronchitis, pneumonia,
and upper respiratory tract infections†

- Excellent clinical results in bronchitis,
pneumonia and upper respiratory tract
infections
- Significantly lower incidence of diarrhea
and skin rash

1. Gold JA, Hegarty CP, Deitch MW, Walker BR:
Double-blind clinical trials of oral cyclacillin
and ampicillin, *Antimicrob Ag Chemother*
15:55-58, (Jan.) 1979.
2. Doto on file, Wyeth Laboratories.



more than just spectrum in otitis media

Clinical efficacy of CYCLAPEN® in otitis media†

Causative Organism		No. of Patients
<i>S. pneumoniae</i>	96	82
	95	
<i>H. influenzae</i>	88	96
	85	
<div><div></div> % Clinical Response</div> <div><div></div> % Bocterial Eradication</div>		

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- Rapidly excreted unchanged in the urine—1½ times faster than ampicillin
- Significantly fewer episodes of diarrhea and skin rash than reported with ampicillin in studies to date
- Excellent clinical response and outstanding bacterial eradication documented in double-blind studies involving 2,581 patients
- New CYCLAPEN[®] Suspension—great-tasting raspberry punch flavor

*Due to susceptible organisms.

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500 mg scored tablets

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Cyclapen[®] (cyclacillin) has less *in vitro* activity than other drugs in the ampicillin class of antibiotics and its use should be confined to the indications listed below

Cyclapen[®] is indicated for the treatment of the following infections

RESPIRATORY TRACT

Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci
Bronchitis and pneumonia caused by *S. pneumoniae* (formerly *O. pneumoniae*)

Dilute Media caused by *S. pneumoniae* (formerly *O. pneumoniae*) and *H. influenzae*

Acute exacerbation of chronic bronchitis caused by *H. influenzae**

*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*

SKIN AND SKIN STRUCTURES (Integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis* (This drug should not be used in any infections caused by *E. coli* and *P. mirabilis* other than urinary tract infections.)

NOTE: Cultures and susceptibility tests should be performed initially and during treatment to monitor the effectiveness of therapy and the susceptibility of bacteria. Therapy may be instituted prior to the results of sensitivity testing

Contraindications

The use of this drug is contraindicated in individuals with a history of an allergic reaction to penicillins.

Warnings

CYCLAPEN SHOULD ONLY BE PRESCRIBED FOR THE INDICATIONS LISTED IN THIS INSERT

CYCLACILLIN HAS LESS *IN VITRO* ACTIVITY THAN OTHER DRUGS OF THE AMPICILLIN CLASS ANTIBIOTICS. HOWEVER, CLINICAL TRIALS HAVE DEMONSTRATED THAT IT IS EFFICACIOUS FOR THE RECOMMENDED INDICATIONS

SERIOUS AND OCCASIONAL FATAL HYPERSENSITIVITY (ANAPHYLACTOID) REACTIONS HAVE BEEN REPORTED IN PATIENTS RECEIVING PENICILLIN

ALTHOUGH ANAPHYLAXIS IS MORE FREQUENT FOLLOWING PARENTERAL ADMINISTRATION, IT HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. THESE REACTIONS ARE MORE APT TO OCCUR IN INDIVIDUALS WITH A HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. THERE ARE REPORTS OF PATIENTS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY REACTIONS WHO EXPERIENCED SEVERE HYPERSENSITIVITY REACTIONS WHEN TREATED WITH A CEPHALOSPORIN BEFORE THERAPY WITH A PENICILLIN. CAREFUL INQUIRY SHOULD BE MADE ABOUT PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, AND OTHER ALLERGENS. IF AN ALLERGIC REACTION OCCURS, THE DRUG SHOULD BE DISCONTINUED AND APPROPRIATE THERAPY SHOULD BE INITIATED. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE, OXYGEN, INTRAVENOUS STEROIDS, AIRWAY MANAGEMENT, INCLUDING INTUBATION, SHOULD ALSO BE ADMINISTERED AS INDICATED

Precautions

Prolonged use of antibiotics may promote the overgrowth of nonsusceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken

PREGNANCY: Pregnancy Category B. Reproduction studies have been performed in mice and rats at doses up to ten times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when cyclacillin is administered to a nursing woman

Adverse Reactions

The oral administration of cyclacillin is generally well tolerated

As with other penicillins, untoward reactions of the sensitivity phenomena are likely to occur, particularly in individuals who have previously demonstrated

hypersensitivity to penicillins or in those with a history of allergy, asthma, hay fever, or urticaria

The following adverse reactions have been reported with the use of cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS)

Other less frequent adverse reactions which may occur and that have been reported during therapy with other penicillins are: anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia, and eosinophilia. These reactions are usually reversible on discontinuation of therapy

As with other semisynthetic penicillins, SGOT elevations have been reported

Dosage and Administration

INFECTION* ADULTS CHILDREN
Dosage should not result in a dose higher than that for adults

Respiratory Tract Infections**
Tonsillitis & Pharyngitis** 250 mg q.i.d. in equally spaced doses
body weight <20 kg (44 lbs) 125 mg q.i.d. in equally spaced doses
body weight >20 kg (44 lbs) 250 mg q.i.d. in equally spaced doses

Bronchitis and Pneumonia 250 mg q.i.d. in equally spaced doses
50 mg/kg/day q.i.d. in equally spaced doses
Mild or Moderate Infections 500 mg q.i.d. in equally spaced doses
100 mg/kg/day q.i.d. in equally spaced doses
Chronic Infections 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity
50 to 100 mg/kg/day in equally spaced doses depending on severity
Otitis Media 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity
50 to 100 mg/kg/day in equally spaced doses depending on severity
Skin & Skin Structures 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity
100 mg/kg/day in equally spaced doses depending on severity
Urinary Tract 500 mg q.i.d. in equally spaced doses
100 mg/kg/day in equally spaced doses

*As with antibiotic therapy generally, treatment should be continued for a minimum of 48 to 72 hours after the patient becomes asymptomatic or until evidence of bacterial eradication has been obtained

**In infections caused by Group A beta-hemolytic streptococci, a minimum of 10 days of treatment is recommended to guard against the risk of rheumatic fever or glomerulonephritis

In the treatment of chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and may be required for several months afterwards

Persistent infection may require treatment for several weeks

Cyclacillin is not indicated in children under 2 months of age

Patients with Renal Failure

Based on a dosage of 500 mg q.i.d. the following adjustment in dosage interval is recommended

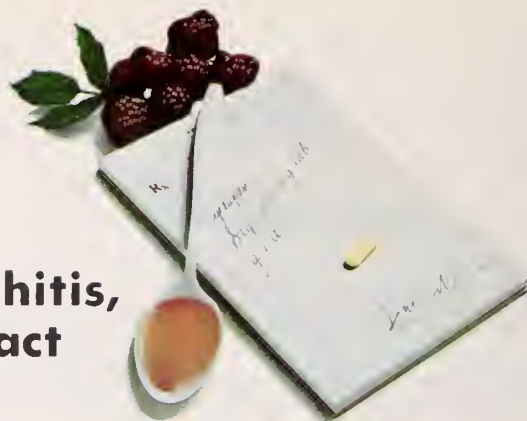
Patients with a creatinine clearance of <50 ml/min need no dosage interval adjustment

Patients with a creatinine clearance of 30-50 ml/min should receive full doses every 12 hours

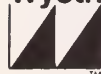
Patients with a creatinine clearance of between 15-30 ml/min should receive full doses every 18 hours

Patients with a creatinine clearance of between 10-15 ml/min should receive full doses every 24 hours

In patients with a creatinine clearance of <10 ml/min or serum creatinine values of >10 mg % serum cyclacillin levels are recommended to determine both subsequent dosage and frequency



Wyeth Laboratories
Philadelphia, Pa. 19101



POSTGRADUATE CALENDAR

November 16, 1979

PEDIATRIC NEUROSURGERY

University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Neurosurgery and the Medical Center Division of Continuing Health Professional Education. Coordinators: Robert A. Sanford, M.D., associate professor of neurosurgery, and Andrew D. Parent, M.D., assistant professor of neurosurgery.

This course will present current concepts in the diagnosis and treatment of pediatric conditions which have neurosurgical implications. Fee: \$50. Credit: 5.5 contact hours, .55 CEU, Category 1 of the AMA Physician's Recognition Award.

December 4, 1979

RELIGION AND MEDICINE IN 20TH CENTURY AMERICA

University Medical Center, Jackson

Sponsored by the University Hospital Department of Pastoral Services, the Medical Center Division of Continuing Health Professional Education and the UMC History of Medicine Society. Coordinator: James L. Travis, Ph.D., director of pastoral services, University Hospital.

Discussion will include medical and clerical care of hospital patients; pastoral care versus psychiatry and ethics in medicine and religion. Fee: \$20. (\$10 for college students)

December 6-8, 1979

FAMILY PRACTICE UPDATE

Holiday Inn Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Family Medicine and the Medical Center Division of Continuing Health Professional Education. Coordinators: T. Walter Treadwell, M.D., professor of family medicine, and Henry J. C. Scrimgeour, M.D., assistant professor of family medicine, University of Mississippi School of Medicine.

This three-day course is for the primary care physician and will emphasize the concept of total patient care. Fee: \$100. Credit: 20.5 contact hours, 2.05 CEU, Category 1 of the AMA Physician's Recognition Award; AAFP credit applied for.

January 7-11, 1980

PRACTICE OF ELECTROCARDIOGRAPHY

University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Medicine and the Medical Center Division of Continuing Health Professional Education.

Discussions will center on the mechanism, structure and function of electrocardiography. New methods will be discussed with emphasis on the computer. This course is for physicians who use electrocardiography in their daily work. Fee: \$150. Credit: 40 contact hours, 4 CEU, Category 1 of the AMA Physician's Recognition Award; AAFP credit applied for.

FUTURE CALENDAR

January 18-19, 1980

ONCOLOGY II

Holiday Inn Medical Center, Jackson

January 24-26, 1980

ADVANCED CARDIAC LIFE SUPPORT PROVIDERS COURSE

University Medical Center, Jackson

February 7-8, 1980

RENAL UPDATE

Holiday Inn Medical Center, Jackson

March 13-15, 1980

SURGICAL FORUM VII

Holiday Inn Downtown, Jackson

All continuing education correspondence should be addressed to: Continuing Health Professional Education, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.

MSMA Begins New Health Information Project

The Mississippi State Medical Association will soon begin a series of local five minute, weekly radio and television shows designed to help consumers become better informed about health care.

The public service programs will feature members of the association discussing health care topics of current public interest.

The new project will be conducted in addition to the health information articles which have been distributed to newspapers throughout the state.

PERSONALS

JAMES ACHORD of UMC was guest speaker at recent meetings of gastroenterologists in Columbus, GA, and family physicians in Jackson, TN.

THOMAS BLAKE of UMC attended the September annual meeting of the Board of Governors, American College of Physicians, in Colorado Springs, CO.

A. B. BRITTON, JR., of Jackson has been elected president of the Mississippi Health Systems Agency, Inc.

WALLACE CALHOUN of Moss Point was recently elected president of the Pascagoula-Moss Point Area Chamber of Commerce.

WALLACE CONERLY of UMC was guest speaker for a continuing education course on acute respiratory insufficiency at the North Mississippi Medical Center in Tupelo.

JOHN C. HALBROOK and CHARLES W. MONTGOMERY announce the opening of their office for the practice of hematology and oncology at 605 W. Main St. in Tupelo.

JAMES HARDY of UMC chaired a session on cancer and moderated a panel discussion on the motivation of a surgeon during the joint conference of the International Society of Surgery and the International Cardiovascular Society, which took place recently in San Francisco.

JAMES L. HUGHES of UMC recently was instructor for a continuing education course in Jacksonville, FL.

WAYNE T. LAMAR of Oxford announces the association of FRED G. CORLEY for the practice of orthopedic surgery.

HERBERT G. LANGFORD of UMC lectured at the recent Lillian Smith Conference for Nutrition Educators in Denver, CO.

LEWIS D. LIPSCOMB of Jackson announces the relocation of his office for the practice of obstetrics and gynecology to Suite 320, St. Dominic Medical Office Building.

TOM MAYER of McComb was recently elected president of the newly-chartered Southwest Regional Medical Foundation.

JAMES R. MEDLIN and JAMES W. SPECK of Ecu have extended their general practice to include the Houston area, with afternoon office hours at Houston Medical Center Plaza.

FRANCIS S. MORRISON of UMC recently spoke to meetings of area physicians in Lafayette, LA, and of the North Carolina Association of Blood Banks in Southern Pines, NC, on the subject of "The Use of Transfusion in the Management of Bleeding Disorders."

ROBERT SMITH of UMC presented a paper at the eighth Brazilian Meeting of Neuroradiology in Belo Horizonte, Brazil.

D. C. STRANGE, T. S. PARVIN, and R. J. ORGLER announce the opening of their office for the practice of general, vascular and thoracic surgery at 500 N. Church St., in Louisville.

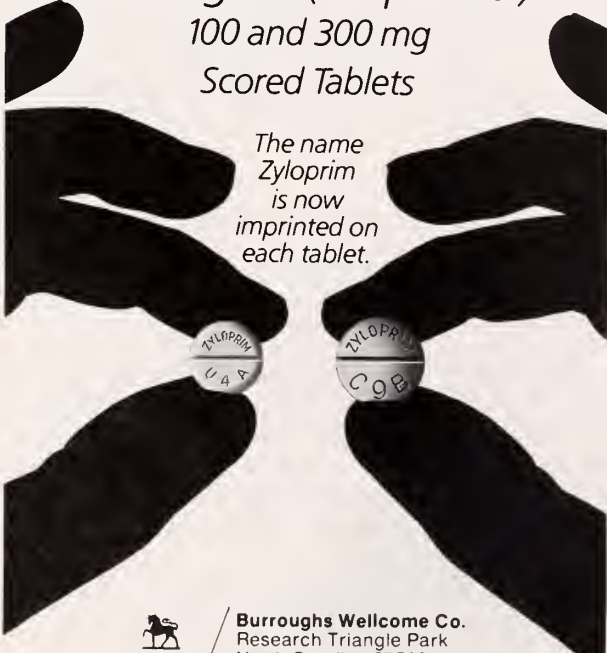
W. LAMAR WEEMS of UMC recently spoke at the Tri-State Urological meeting in Sea Island, GA, the meeting of the Association of Surgical Technologists in Biloxi, and at the Forrest General Hospital in Hattiesburg.


GEORGE W. WHARTON of Jackson announces the association of J. PATRICK BARRETT for the practice of pediatric orthopedics and spinal deformities.

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ZYLOPRIM[®]
the original (allopurinol)
 100 and 300 mg
 Scored Tablets

*The name
 Zyloprim
 is now
 imprinted on
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NEW MEMBERS

SACCOCCIA, PHILIP, JR., Gulfport. Born Providence, RI, Sept. 3, 1945; M.D., Albany Medical College, Albany, NY, 1971; interned and residency in pathology, Mason Clinic-Virginia Mason Hospital, Seattle, WA, 1974-77; elected by Coast Counties Medical Society.

DEATHS

DABBS, JAMES M., Waynesboro. Born Mooreville, MS, June 25, 1927; M.D., University of Texas Southwestern Medical School, Dallas, 1954; interned University Hospital, Augusta, GA, one year; general practice residency, South MS Charity Hospital, Laurel, 1955-56; died Sept. 3, 1979, age 52.

HAMILTON, H. NELSON, Greenville. Born Russellville, AL, June 27, 1922; M.D., Johns Hopkins University School of Medicine, Baltimore, MD, 1945; interned, same, one year; Orthopedic surgery residency, University of Alabama Hospital, one year; orthopedic surgery residency, V. A. Medical Group Teaching Hospital, Memphis, TN, 1955-57; Orthopedic surgery residency, Arkansas Children's Hospital, Little Rock, 1957-58; died Aug. 26, 1979, age 57.

Practice Management Workshops Conducted Last Month

Techniques in office supervision, telephone communications and collection management were topics of MSMA's recent practice management workshops, which were conducted by Lynn Dowling of the AMA.

Medical office managers who attended the Jackson workshop learned techniques in recruiting (and keeping) good employees. Such topics as interviews, office policy manuals, record-keeping, performance appraisals and salary reviews, motivating employees and resolving conflicts were discussed. Medical office managers from all over the state attended the meeting, which was marked by full registration.

Oxford and Biloxi were sites for two seminars conducted for medical office assistants. These workshops explored the subjects of telephone management and collection management.

Improving office-patient relations through proper and courteous telephone techniques were discussed,

with emphasis placed on the role of the medical assistant as a good communicator. The merits of patient information booklets and patient survey questionnaires were described. Establishing credit policies, specific collection techniques, solutions to special problems, accounts receivable forms and records, and application of physicians' accounts to the federal Truth in Lending Law were other subjects covered.

Flying Physicians Honor Dr. Caine

Curtis W. Caine, M.D., of Jackson, was named 1979 Airman of the Year by the Flying Physicians Association, a society of 2,500 doctor/pilots which promotes aviation proficiency, safety and Samaritan activities. Dr. Caine formerly served the society as president, director, and chairman of numerous committees.

The testimonial was given "in grateful recognition for his outstanding services to the cause of aviation safety and to his continued dedication to Samaritan flight activities."

Dr. Caine's 5,000 hours as pilot-in-command have included medical missions to the Dominican Republic, Mexico, Honduras, Haiti and Viet Nam.

UMC Researcher Develops Artificial Trachea

Dr. Barry Sauer, University of Mississippi Medical Center associate professor of surgery (orthopedics research), has a \$90,322 grant from the Department of Health, Education and Welfare to develop an artificial trachea.

Dr. Sauer uses porous polyethylene rings with a tube manufactured in the body of the laboratory animal which will receive the artificial trachea. The rings mimic the natural cartilage rings around the trachea and give the prosthesis its strength.

He first places the rings around a plastic tube — the same diameter of the natural trachea — and surgically implants it in the body of the animal. In approximately one month, fibrous tissue will surround both plastic tube and rings. The plastic tube is then cut out, leaving an indigenous tube strengthened by the rings which have become enmeshed in the tissue.

Preliminary results with the method indicate that the tube will function exactly like the trachea, he said. But the research is still in the early stages. "If the studies with animals are successful, we can anticipate a human application in the future," Dr. Sauer said.

Christmas Seal Organization Celebrates 75 Years



Dr. Guy D. Campbell of Jackson, right, congratulates actor Eli Wallach on his presentation of "The Story of the First Christmas Seal" at a recent national meeting of the American Lung Association. Dr. Campbell is Mississippi's representative director to the national Christmas Seal voluntary health organization, which is celebrating 75 years of progress in the fight against lung diseases.

UMC Provides Telephone Consultations

Faculty obstetricians and neonatologists at the University of Mississippi Medical Center are on call 24 hours a day for perinatal consultation through UMC "hotlines."

A new Department of Obstetrics and Gynecology toll free consult number is 1 (800) 962-2213. Physicians in the Jackson area may call 987-6613. The perinatal hotline joins the new newborn hotline number, 987-3535 (collect), which the Department of Pediatrics initiated some years ago for quick access to assistance with newborn problems.

Comprehensive assistance with any other gynecologic or pediatric problem is also available via the UMC "hotlines."

Librax®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br

Please consult complete prescribing information, a summary of which follows:

Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows: "Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis. Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl/Roche) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated, avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

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Manati, Puerto Rico 00701

In irritable
bowel syndrome*



Adjunctive
Librax[®]

Each capsule contains
5 mg chlordiazepoxide HCl (LIBRIUM[®])
and 2.5 mg clidinium Br (QUARZAN[®]).

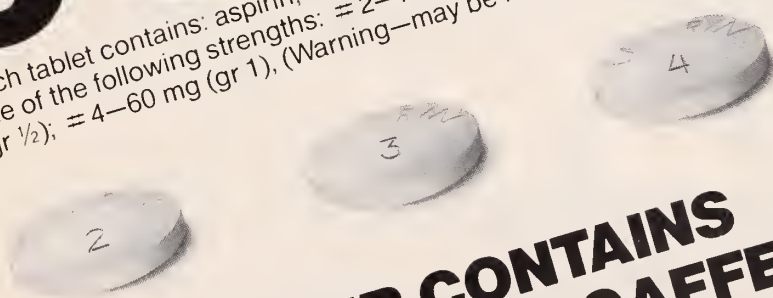
antianxiety/antispasmodic/antimotility

ROCHE

*Librax has been evaluated as possibly effective for this indication.
Please see brief summary of prescribing information on preceding page.

~~EMPIRIN[®]~~ ~~COMPOUND~~ ~~CODEINE~~ IS NOW ~~EMPIRIN[®]~~ ~~CODEINE~~

Each tablet contains: aspirin, 325 mg; plus codeine phosphate in one of the following strengths: $\approx 2-15$ mg (gr $\frac{1}{4}$); $\approx 3-30$ mg (gr $\frac{1}{2}$); $\approx 4-60$ mg (gr 1). (Warning—may be habit-forming)



**NO LONGER CONTAINS
PHENACETIN OR CAFFEINE.**



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MEETINGS

National and Regional

American Medical Association Winter Scientific Meeting, January 12-15, 1980, San Antonio, TX; James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi Academy of Family Physicians, Annual Meeting, July 1980, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Mississippi State Medical Association, 112th Annual Session, April 27, 1980, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638, Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, January, April, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., B6 Medical Arts Bldg., 1151 N. State St., Jackson 39201. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson, Yazoo.

Clairborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 p.m., Clarksdale. Henry McCrory, Secy., P.O. Box 340, Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, 1st Wednesday, January, March, May, September and November. H. S. Barrett, Secy., P.O. Box 1898, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. W. W. East, Secy., P.O. Box 4128 West Station, Meridian 39301. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, 1st Tuesday, February, June, September, December, Ramada Inn, Natchez. Walter T. Colbert, Secy., P.O. Box 1167, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, December. Paul Mink, Secy., 314 W. Adams St., Kosciusko 39090. Counties: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. James M. Cooper, Secy., 605 Garfield St., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, March, August, December. Cherie Friedman, Secy., 424 South 5th, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Thomas Waller, Secy., P.O. Box 1487, Starkville 39759. Counties: Clay, Oktibbeha, Lowndes, Noxubee.

Singing River Medical Society, 3rd Monday, February, May, August, November. Robert D. Holbert, Secy., P.O. Box 1502, Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. Clyde Allen, Secy., 1245 N. 6th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, Secy., The Street Clinic, Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39216

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Hospital
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Delta Medical Center
Greenville, MS 38701

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

Mississippi Chapter
American College of Surgeons
Box 5229
Jackson, MS 39216

Mercy Regional Medical Center
100 McAuley Drive
Vicksburg, MS 39180

St. Dominic-Jackson Memorial Hospital
Lakeland Drive
Jackson, MS 39216

North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
2809 Denny Avenue
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Lung Association Leaders Meet



Dr. John F. Busey of Jackson, right, president of the Mississippi Lung Association, and Charles Schulz, creator of the comic strip "Peanuts," are concerned about matters of "life and breath." Schulz is serving as national chairman of the 1979 Christmas Seal campaign, and Dr. Busey directs MLA programs of education, service and research to prevent and control lung diseases and respiratory illnesses in Mississippi.

PLACEMENT SERVICE

The Mississippi State Medical Association offers this placement service free of charge to Mississippi hospitals or clinics seeking physicians, and to physicians seeking to relocate in the state. Display advertisements will be charged at regular rates. Out-of-state clinics advertising for physicians will be listed in the classified department at regular classified rates.

Physicians Wanted

OTOLARYNGOLOGY ASSOCIATE desired for ENT practice. Modern clinic near major hospital. Active allergy division. Contact: James E. Harris, M.D., P.O. Box 671, Hattiesburg, MS 39401. Telephone (601) 264-4407 (office) or (601) 584-7420 (home).

FAMILY PRACTITIONER or general practitioner with surgery interest. Free office space. Moving expenses paid. Modern 36-bed hospital with 60-bed extended

care facility. Contact: Nick Wilson, Administrator, Quitman County Hospital, Box 330, Marks, MS 38646. Call collect (601) 326-8031.

PHYSICIAN WANTED to take over established general practice in Tunica. Completely equipped office and community hospital available. Located 35 miles from major metropolitan area. Contact: Mrs. W. W. Nobles, Box 307, Tunica, MS 38676; telephone (601) 363-1341.

Situations Wanted

PEDIATRICIAN desires opportunity to practice pediatric nephrology with a limited amount of general pediatrics. Concluding a three year fellowship in June 1980. Contact: James R. Matson, M.D., University of Iowa Hospital, Department of Pediatrics, Iowa City, IA 52242.

GENERAL SURGEON (Board Certified) with wide experience. Interested in relocating to MS. Native of Louisiana; formerly practiced there. C-V on request. Contact: Marvin M. Ettinger, M.D., 827 Puma Canyon Lane, Glendale, CA 91740.

PHYSICIANS

One of America's largest health care corporations is currently seeking both a full and part time physician for our Plasma Donor Center located in Biloxi, MS. Responsibilities will include performing physicals in conjunction with donor screening and evaluation. The part time position would provide support when regular staff physicians are on vacation.

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IN CONCLUSION

In the last seven years, there has been a decrease of 39% in the number of prescriptions for sedative-hypnotic drugs, according to a study conducted by the Institute of Medicine at the request of the White House Office of Drug Policy and the National Institute on Drug Abuse. In 1971 there were 41.7 million prescriptions for the drugs; in 1977, 25.6 million. The study also noted a shift away from barbiturates toward benzodiazepines (barbiturates accounted for 47% of the prescriptions in 1971, but only 17% in 1977).

About the 1980 Census: More than half of the questions asked will concern housing; the job of printing the questionnaires will take eight months, cost about \$8.1 million, and use 5,000 tons of paper and 85 tons of ink; laid end to end, the questionnaires would stretch around the earth three times; a temporary work force of about 270,000 persons will be hired; every one percent of the population that mails back the completed questionnaire as requested will save taxpayers an estimated \$2 million in follow-up costs.

The Director of Rheumatology at the Albert Einstein Medical Center in Philadelphia, Dr. George E. Ehrlich states, "the current worldwide craze for physical fitness is setting the stage for future osteoarthritis." He notes that the natural increase in the average life span, combined with poor exercise habits that result in slow but continuous injury to joints may be responsible for an increase in the incidence of osteoarthritis in years to come. Dr. Ehrlich is also Professor of Medicine and Rehabilitation Medicine at Temple University.

Cocaine production in the United States is nine to ten times the legitimate need, according to the Drug Enforcement Administration officials who testified before the House Select Committee on Narcotics Abuse. Others testifying at the same hearing said that "availability, abuse and popularity of cocaine in the U.S. has reached pandemic proportions." They challenged the "conventional wisdom" in certain segments of the population which believes that cocaine poses little or no danger to the health of its users.

A recent study cites these facts about the vaccine industry: since 1967, the number of active vaccine manufacturers has declined 50%; the number of licensed vaccine products has declined 60%; there are no active manufacturers for at least ten types of licensed vaccines; for 19 types of vaccines, including poliovirus vaccine, the country is dependent on a single American manufacturer. Liability problems and the fact that Medicare can pay only for treatment of infectious diseases, not prevention, were cited as factors.

ROCHE

For recurrent attacks of urinary tract infection in women

Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

- Convenient b.i.d. dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
20	9	1 teasp. (5 ml)	½ tablet
40	18	2 teasp. (10 ml)	1 tablet
60	27	3 teasp. (15 ml)	1½ tablets
80	36	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	½ the usual regimen
Below 15	Use not recommended

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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Division of Hoffmann-La Roche Inc.
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Please see back cover.

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the BactrimTM

3-system counterattack

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Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

ROCHE

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

December 1979

BALCONY

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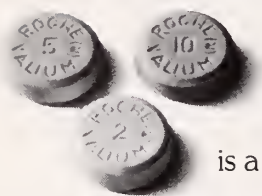
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Primary Biliary
Cirrhosis

Triple Ureters



A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active diazepam as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium®[®] diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic
tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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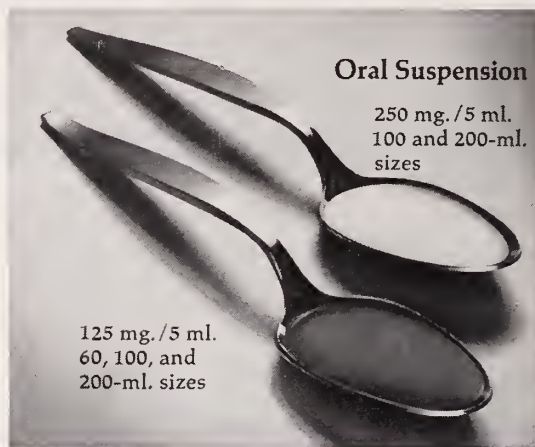
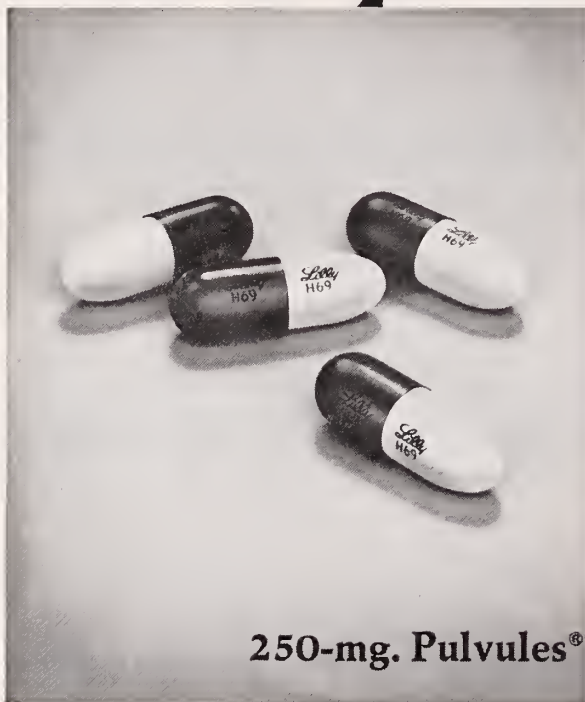
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AMA Publishes New Volume On Medical Practice Studies

The average office-based American physician now works 50.3 hours and provides 130.6 patient visits each week, says the new edition of the American Medical Association's *Profile of Medical Practice 1979*.

The average office-based physician worked 47 weeks in the year, with five weeks off for vacation and for attending continuing medical education seminars.

Surgeons in 1978 worked the longest hours per week, 53.2. Physicians in larger cities worked shorter hours than those in small towns or rural areas.

Of the average of 130.6 patient visits per week, 92.1 were in the office and 36.2 in the hospital.

There were 421,278 physicians in the United States and possessions as of Dec. 31, 1977, the new book shows. Of these, 78.9% (332,393) were engaged in patient care as their primary activity. Some 7.4% (31,226) were not involved principally in patient care. The others were inactive, not classified or had no known address. Those not in patient care included doctors in medical teaching, administration and research.

Some 12.8% (50,088) of all American physicians lived in California. New York was second with 45,147, or 11.6%.

There were 86,879 foreign medical graduates in the United States and possessions as of Dec. 31, 1977. This accounted for 20.6% of the total physician population.

The book was prepared by the AMA's Center for Health Services Research and Development. Editors are John C. Gaffney and Gerald L. Glandon.

Copies may be purchased from Center for Health Services Research and Development, American Medical Association, 535 North Dearborn St., Chicago, IL 60610. Individual copies are \$6.00.

UMC Names New Department Head

Dr. Kenneth V. Anderson of Atlanta recently joined the University of Mississippi Medical Center faculty as chairman of the Department of Anatomy.

The new department chairman and professor of anatomy has been on the School of Medicine faculty at Emory University since 1966. Recipient of the 1968-1973 Research Scientist Development Award from the National Institute of Mental Health, Dr. Anderson is research manuscript reviewer for several journals.

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WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations,

prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Congress Changes Health Planning Law

Congress has passed and the president has signed Public Law 96-79, the Health Planning and Resources Development Amendments of 1979. The law revises and extends for three years health planning which authorities first laid out in P.L. 93-641.

P.L. 96-79 makes major changes in the health planning program, one of which will amend the present makeup of the Board of Directors of the Mississippi Health Systems Agency. Presently the Mississippi Health Systems Agency Board of Directors is selected through a complex process involving the members of the Board and its subarea advisory councils. P.L. 96-79 will, in effect, prohibit the selection of more than one-half of the members of the Board by this process.

In another area, perhaps in reaction to the tendency of many Health Systems Agencies (HSAs) to range far afield from their statutorily assigned mission, the new law also requires health systems plans developed by the HSAs to focus on health care equipment and institutional services and facilities.

In other changes, P.L. 96-79 extends certificate of need requirements to all diagnostic and treatment equipment worth \$150,000 or more regardless of

location (physician's office, etc.) if it is to be used for hospital inpatients. In an effort to encourage and speed development of HMOs the new law exempts such organizations from certificate of need requirements provided they meet certain minimum requirements dealing with services and enrollment.

The law also establishes a new grant program effective April 1, 1980, to provide assistance to hospitals for discontinuance or conversion of unneeded services. This program will seek to convert overbedded and underutilized hospitals to other services.

Perinatal Disease Course Highlights Pathology Meet

The 69th annual meeting of the United States-Canadian Division of the International Academy of Pathology will be held at the Hyatt Regency Hotel in New Orleans, LA, Feb. 25-29. Twelve specialty conferences, 50 short courses, a special course on "Electron Microscopy in Diagnostic Pathology," and a long course on "Perinatal Disease" will be presented.

Further information may be obtained from Dr. Nathan Kaufman, Secretary-Treasurer, 1003 Chafee Ave., Augusta, GA 30904.

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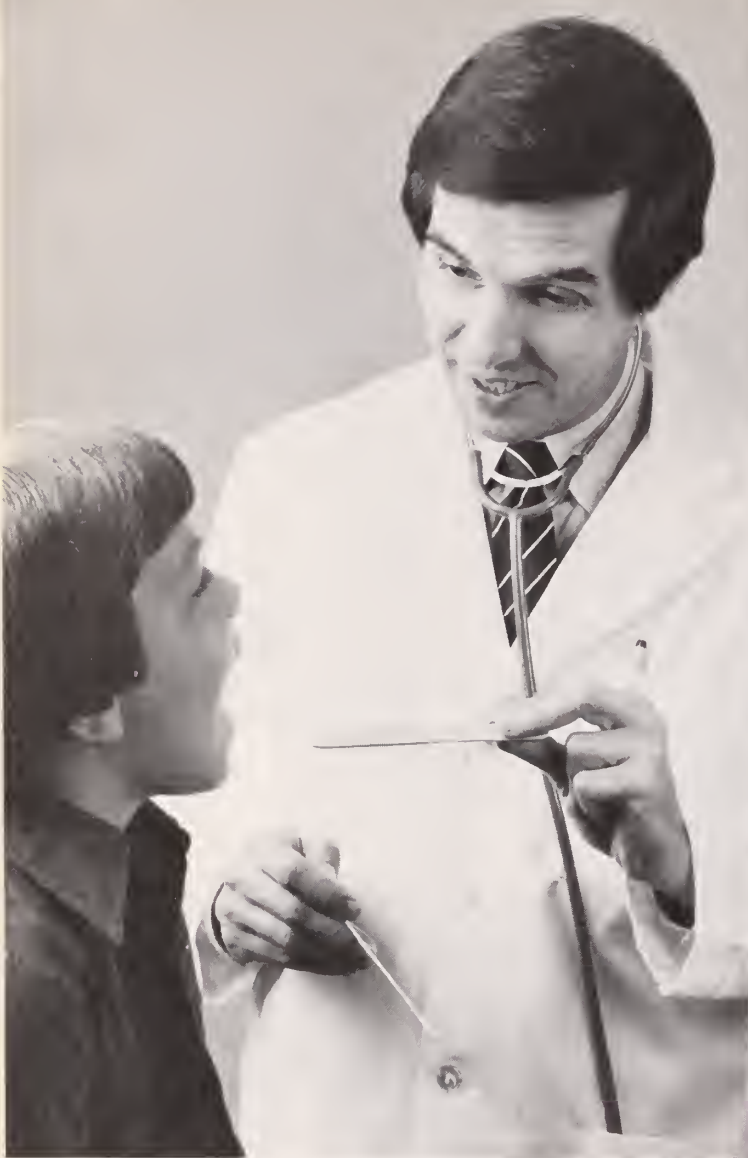
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Isocult® culture tests also available for:

- Bacteriuria
- Neisseria gonorrhoeae
- Candida (Manilia)
- Combination N. gonorrhoeae/Candida
- Trichomonas vaginalis
- Combination T. vaginalis/Candida
- Staphylococcus aureus
- Pseudomonas aeruginosa

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880 West Maude Avenue
P.O. Box 61947
Sunnyvale, CA 94086

Please send me additional information on the Isocult®
In-Office Diagnostic Culturing System

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Medical Specialty _____

Address _____

City _____ State _____ Zip _____

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NEWSLETTER

December 1979

Dear Doctor:

Less than 1% of surgical cases screened under pre-set criteria by hospitals in seven areas served by professional standards review organizations (PSRO's) were found not justified. That is the finding disclosed by AMA's Surgical Criteria Project, an 18-month investigation conducted under contract with the Department of HEW. The sharp contrast between these findings and the estimated 17% unnecessary surgery rate widely publicized a few years ago is attributed to methodology of study.

The new study established scientific criteria to review the medical necessity and appropriateness of 155 selected surgical procedures and tested them in the PSRO-monitored hospitals. The 1974 study had applied the nonconfirmation rate in 1,356 "second opinion" cases to the 14 million elective operations performed that year to arrive at its conclusions.

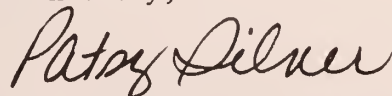
A national anti-inflation campaign has been initiated by the U.S. Departments of Agriculture, Commerce, Labor and Treasury in an effort to build a national consensus for individual and collective efforts to deal with the problem. A recent survey revealed most Americans have little understanding of inflation. The campaign offers a booklet, "Dollar\$ and Sen\$e," which defines the problem and offers consumer advice.

The overall rate of inflation continues to outpace the rate of increase in physicians' fees and other medical care costs. Consumer Price Index figures for September show that physicians' services rose by 0.7%, while the CPI's all items index increased by 1.0% and the all services component rose 1.3%. For the 12-month period ending in September, doctors' services increased 9.6% - all items by 12.1% and all services, 11.6%.

The most recent Gallup survey of public attitude toward health care shows growing support for national health insurance (67% now favor it) because of concern over costs. However, public confidence in the ability of government to propose fair and workable health care policies has declined from 58% to 48%. Most Americans are satisfied with quality of medical care (88%) and with time required to get an appointment (83%).

Cost awareness was the focus of a Cost Containment Fair recently conducted at University Medical Center. The objectives were to inform medical personnel of exact costs of different procedures, to outline methods to prevent additional costs from being incurred (such as proper preparation of x-ray patients) and to suggest seeking alternate, less expensive measures to use in certain situations.

Sincerely,



Patsy Silver
Managing Editor

must What you ~~should~~ know about the new Mississippi Drug Substitution law

As of July 1, 1979, the state legislature has dramatically changed the lawful way of prescribing drugs and of writing a prescription. Until now, writing the brand name of a drug on the prescription was enough to ensure that the

brand-name drug would indeed be dispensed. Now that no longer suffices. Unless the physician takes the necessary extra steps, for many drugs the pharmacist may substitute an "equivalent" generic drug where available.

Key points for the physician in writing prescriptions

- "Every prescription within this state ...shall be on prescription forms containing two (2) lines for the prescriber's signature."
- "In the event a prescription form which does not contain the two (2) signature lines...is utilized by the prescriber, he shall write in his own handwriting the words 'dispense as written' thereupon to prevent product selection."

Rx

dispense as written

substitution permissible

The decisions the physician must make

The physician should become acquainted with the newly mandated prescription form illustrated on the preceding page. This form requires a distinct change in the way prescriptions are written.

There are now *two* lines for the prescriber's signature. The prescription may be filled generically unless the physician signs on the line stating

"dispense as written." Special note should be made of the position of this line in the lower *left* of the prescription form rather than on the right, where the physician has customarily signed prescriptions. Only by signing on the left side can the physician be assured that the brand-name drug will be dispensed.

If the physician elects to permit substitution, this must be indicated by signing on the line marked "substitution permissible." This line is in the lower right hand corner of the prescription form.

MSD
MERCK
SHARP &
DOHME

J9MK11

There is no substitute for research.

Riverside.

Mississippi's Unique Psychiatric Hospital.

Riverside Hospital is unique in Mississippi.

As a privately owned 56-bed short term care facility for treating patients with psychiatric illness, emotional problems, or substance abuse, it is the only hospital of its kind in the state.

Architecturally designed to create an attractive open environment, Riverside's "non-institutional" atmosphere helps prepare the patient for specific therapy, healthy entertainment and physical recreation.

The clinical program incorporates a wide range of modern psychiatric ideas. Emphasis is placed on interpersonal relationships, small group functions, and professional individualized care.

The Medical Staff includes a large number of physicians in private practice in the Jackson area. All are qualified and limit their practice to psychiatry.

Riverside is licensed by the Mississippi Commission on Hospital Care, and fully accredited by the Joint Commission on Accreditation of Hospitals.

Physicians who have patients that would benefit from this type of treatment approach may obtain referral information by contacting the Admitting Office.

Riverside Hospital

P.O. Box 4297, Jackson, MS 39216
Telephone: (601) 939-9030



DATELINE

HMO Intentionally Delays Appointments

Washington, DC - This city's largest health maintenance organization has conceded that lengthy appointment delays are intentional to keep down costs. The president of the Group Health Association recently said, "to fully respond to the demands of every member would create costs that would be unacceptable to the majority." Routine Ob-Gyn appointments sometimes take as long as 12 weeks. Another Washington HMO reports its patients face waits of up to eight weeks for routine visits.

Jackson Schools Push Nursing

Jackson, MS - Jackson's public schools will cooperate with a Chamber of Commerce task force which hopes to alleviate a critical shortage of nurses in the city's hospitals. The long-term effort emphasizes building the local supply through early encouragement, orientation and preparation. A Chamber spokesman said there are currently 400 nursing staff vacancies in Jackson. Some 900 nursing positions are open throughout the state.

SSA Announces Disability Changes

Jackson, MS - Several changes have been made in the list of impairments considered disabling under the Social Security and Supplemental Security Disability Programs. A booklet with information for the practicing physician about the disability programs and the changes is available from State Disability Determination Services, according to Dr. John Barr, chief medical consultant. For a copy, write to Dr. Barr at P.O. Box 1271, Jackson, MS 39205 or call 922-6811 (out of town, call 800/962-2230).

AAFP Reports Residency Figures

Kansas City, MO - Seventy-eight percent of the medical schools in the U.S. have departments or divisions of family practice, and another five percent have plans to institute such a program. Those are the findings of the annual survey conducted by the American Academy of Family Physicians. Current family practice residents total 6,531. Of these, 2,360 are in the first year; 2,205 are in the second year; and 1,966 are in the third year. Residency programs have graduated 6,666 since Jan. 1, 1970.

UMC Enrollment Figures Told

Jackson, MS - The School of Health Related Professions reported the largest gain in enrollment of any school on the UMC campus, with 196 students enrolled, an increase of 21% over last year. Other enrollment figures include: School of Medicine, 600; School of Dentistry, 147; School of Nursing, 174; graduate programs in the health sciences, 59; certificate programs, 62; postgraduate programs, 272. Total enrollment this fall at UMC is 1,510 students.

Jackson Is Selected As HMO Site

The Department of Health and Human Services (DHHS) has announced that it is in the final stages of an HMO market development plan intended to increase HMO enrollment to 19 million people within 10 years.

HEW has targeted the plan under development since 1978 to include 61 communities including Jackson, Mississippi. Jackson was selected because of its high population growth rate, a factor which DHHS believes provides a potential of HMO customers.

DHHS Secretary Patricia Harris characterized the strategy as one designed to concentrate on areas "where HMOs can save the most money" and to encourage private investment "to the maximum extent possible."

A DHHS spokesman stated that no budget had been developed for the new national strategy and that the department did not plan to release figures on the costs involved.

AMA Responds To FTC Ruling

The American Medical Association has responded to an FTC ruling on the association's role in physician advertising by commending the Commission's recognition of the AMA's "valuable and unique" role with respect to preventing false and misleading advertising. At the same time the association challenged the allegation that it has restrained competition by restricting advertising among its members.

"We are pleased that the Commission has endorsed the position the association has taken throughout the case, that the profession and the public are well served with quality care if medical societies are involved in seeing that information that is advertised is truthful and nondeceptive," said Newton N. Minow, representing the AMA. "However, the AMA must continue to take issue with the Commission's decision that the ethical principles of the association have prevented physicians and medical organizations from disseminating information on the prices and services they offer. The AMA Principles of Medical Ethics do not proscribe advertising, but they do prohibit false and misleading advertising that may adversely affect quality care to patients . . . to the extent that the order continues to prevent medical societies from taking action against deceptive or other unethical practices that may harm or

mislead patients, the AMA will ask the Court of Appeals to reverse the order," Minow said.

The Commission's decision is based on the FTC's complaint issued in December 1975. That complaint charged the American Medical Association with violating Section 5 of the FTC Act by restricting the ability of their members to advertise for and solicit patients and to enter into various contractual arrangements in connection with the offering of their services to the public.

Medics Prepare For Olympics

Fifty-nine physicians and a number of physical therapists and nurses will be on hand to handle medical problems that occur at the 1980 Winter Olympics, according to George G. Hart, M.D., chairman of medical arrangements. He described the preparations in a recent article in the *Journal of the American Medical Association*.

The games are expected to draw more than 100,000 athletes, officials and spectators daily during the Feb. 13-24 events. Separate clinics for athletes and spectators will be maintained at each competition site.

Priority at the athletes' clinics will be placed on treatment that permits them to return to competition. Spectators will receive mostly emergency treatment and evacuation to the nearest hospital.

Physicians from other countries will accompany their nation's athletes to the Winter Games. Each nation's training site will have a first aid facility and ambulance service, with assistance by American physicians if requested.

Three hospitals in the area will handle athletes and spectators who require hospitalization. Military helicopter teams will be available for medical evacuations.

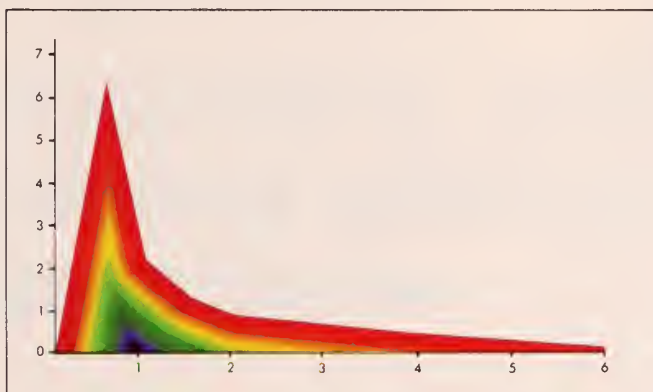
AMA Sports Medicine Conference Is Next Month

"Sports Medicine for the Primary Care Physician" will be the theme of the 21st American Medical Conference on Sports Medicine, to be held Jan. 12 at San Antonio.

Sports medicine authorities from across the nation will discuss such topics as women in sports, the physical examination of the young athlete, and the evaluation, treatment and prevention of injuries.

Dr. Kenneth H. Cooper, M.D., executive director of the Aerobics Center, The Cooper Clinic, Dallas, will be keynote speaker for the conference.

more
than just spectrum



New **CYCLAPEN**[®]
(cyclacillin) Tablets/
Suspension

**Efficacy
proven in the
treatment of
otitis media,
bronchitis,
pneumonia and
upper respiratory
tract infections*
with fewer
side effects.**



*Due to susceptible organisms
(See important information on last page.)

New **CYCLAPEN**[®] (cyclacillin) Tablets/ Suspension

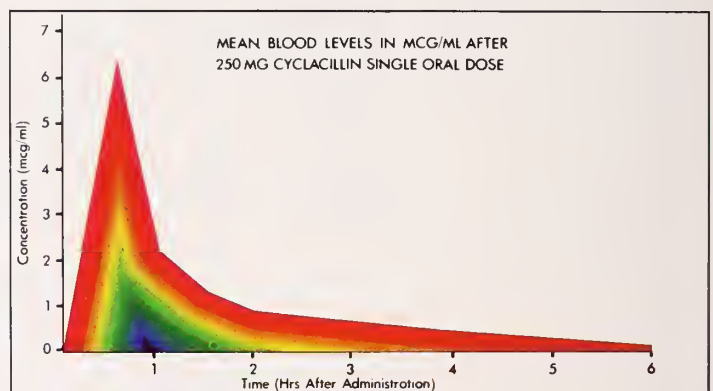
efficacy with fewer side ampicillin confirmed in studies of 2,581

Rapid, virtually complete
absorption from GI tract

Rapid onset of action—
mean peak serum levels
within 30 minutes

Exceptionally high peak
blood levels—3 times
greater than ampicillin
(clinical efficacy may not
always correlate with
blood levels)

Rapidly excreted
unchanged in the urine—
1½ times faster than
ampicillin



Clinical efficacy of CYCLAPEN[®] in otitis media[†]

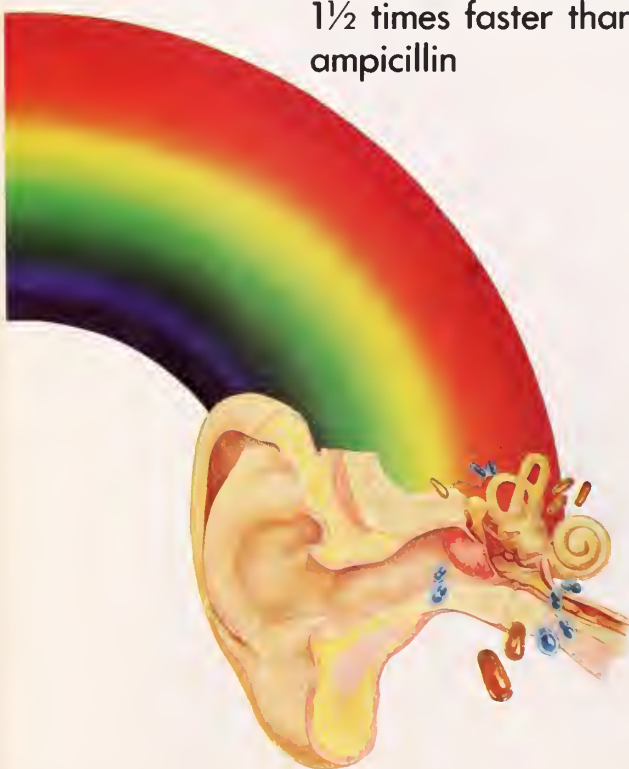
Causative Organism			No. of Patients
<i>S. pneumoniae</i>	96		82
	95		
<i>H. influenzae</i>	88		96
	85		
<div><div></div> % Clinical Response</div> <div><div></div> % Bacterial Eradication</div>			

more than just spectrum in otitis media

*Includes all patients treated. 2,415 evaluated for safety;
1,819 evaluated for efficacy.

[†]Due to susceptible organisms.

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effects than double-blind patients*

Fewer side effects with CYCLAPEN® in double-blind studies to date^{1,2}

Total number of drug-related side effects in all patients	
CYCLAPEN®	128 of 1,286 (10%) of patients
ampicillin	202 of 1,129 (18%) of patients
Difference statistically significant (P < 0.001)	

CYCLAPEN® (cyclacillin)
Effective for otitis media[†] in children

- Excellent clinical results in eliminating the two most common causative organisms in otitis media
- Significantly lower incidence of diarrhea and skin rash in children treated with CYCLAPEN® Suspension

	diarrhea	rash
CYCLAPEN	9.1%	2.1%
ampicillin	19.2%	5.8%
	P < 0.001	P < 0.03

1. Gold JA, Hegarty CP, Deitch MW, Walker BR: Double-blind clinical trials of oral cyclacillin and ampicillin, *Antimicrob Ag Chemother* 15:55-58, (Jon.) 1979.

2. Doto on file, Wyeth Laboratories.

(See important information on next page.)



In bronchitis,
pneumonia and
upper respiratory
tract infections[†]

High cure rate with CYCLAPEN®		
Causative Organism	Bronchitis/Pneumonia†	No. of Patients
<i>S. pneumoniae</i>	100	73
	95	
Chronic Bronchitis† (acute exacerbation)		
<i>H. influenzae</i>	92	12
	Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to <i>H. influenzae</i> .	
Streptococcal Sore Throat†		
Group A beta-hemolytic Streptococcus	100	44
	86	
<div><div></div> % Clinical Response</div> <div><div></div> % Bacterial Eradication</div>		

more than
just spectrum
CYCLAPEN®
(cyclacillin) Tablets/
Suspension

Wyeth Laboratories
Philadelphia, Pa 19101



New from Wyeth Laboratories

CYCLAPEN[®]

(cyclacillin) Tablets/
Suspension



more than just spectrum in otitis media, bronchitis, pneumonia, and upper respiratory tract infections*

- Rapid, virtually complete absorption from GI tract
- Rapid onset of action—mean peak serum levels within 30 minutes
- Exceptionally high peak blood levels—3 times greater than ampicillin (clinical efficacy may not always correlate with blood levels)
- Rapidly excreted unchanged in the urine—1½ times faster than ampicillin
- Significantly fewer episodes of diarrhea and skin rash than reported with ampicillin in studies to date
- Excellent clinical response and outstanding bacterial eradication documented in double-blind studies involving 2,581 patients
- New CYCLAPEN[®] Suspension—great-tasting raspberry punch flavor

*Due to susceptible organisms.

How Supplied

CYCLAPEN[®] (cyclacillin) tablets:
250 mg scored tablets
500 mg scored tablets

Indications

Cyclapen[®] (cyclacillin) has less *in vitro* activity than other drugs in the ampicillin class of antibiotics and its use should be confined to the indications listed below.

Cyclapen[®] is indicated for the treatment of the following infections.

RESPIRATORY TRACT

Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci
Bronchitis and pneumonia caused by *S. pneumoniae* (formerly *D. pneumoniae*)
Otitis Media caused by *S. pneumoniae* (formerly *D. pneumoniae*) and *H. influenzae*
Acute exacerbation of chronic bronchitis caused by *H. influenzae**

*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillase producers

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis* (This drug should not be used in any infections caused by *E. coli* and *P. mirabilis* other than urinary tract infections.)

NOTE: Cultures and susceptibility tests should be performed initially and during treatment to monitor the effectiveness of therapy and the susceptibility of bacteria. Therapy may be instituted prior to the results of sensitivity testing.

Contraindications

The use of this drug is contraindicated in individuals with a history of an allergic reaction to penicillins.

Warnings

CYCLAPEN SHOULD ONLY BE PRESCRIBED FOR THE INDICATIONS LISTED IN THIS INSERT.

CYCLAPEN HAS LESS *IN VITRO* ACTIVITY THAN OTHER DRUGS OF THE AMPICILLIN CLASS ANTIBIOTICS. HOWEVER, CLINICAL TRIALS HAVE DEMONSTRATED THAT IT IS EFFICACIOUS FOR THE RECOMMENDED INDICATIONS. SERIOUS AND OCCASIONAL FATAL HYPERSENSITIVITY (ANAPHYLACTOID) REACTIONS HAVE BEEN REPORTED IN PATIENTS RECEIVING PENICILLIN.

ALTHOUGH ANAPHYLAXIS IS MORE FREQUENT FOLLOWING PARENTERAL ADMINISTRATION, IT HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. THESE REACTIONS ARE MORE APT TO OCCUR IN INDIVIDUALS WITH A HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. THERE ARE REPORTS OF PATIENTS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY REACTIONS WHO EXPERIENCED SEVERE HYPERSENSITIVITY REACTIONS WHEN TREATED WITH A CEPHALOSPORIN. BEFORE THERAPY WITH A PENICILLIN, CAREFUL INQUIRY SHOULD BE MADE ABOUT PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, AND OTHER ALLERGENS. IF AN ALLERGIC REACTION OCCURS, THE DRUG SHOULD BE DISCONTINUED AND APPROPRIATE THERAPY SHOULD BE INITIATED. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE, OXYGEN, INTRAVENOUS STEROIDS, AIRWAY MANAGEMENT, INCLUDING INTUBATION, SHOULD ALSO BE ADMINISTERED AS INDICATED.

Precautions

Prolonged use of antibiotics may promote the overgrowth of nonsusceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken.

PREGNANCY: Pregnancy Category B. Reproduction studies have been performed in mice and rats at doses up to ten times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when cyclacillin is administered to a nursing woman.

Adverse Reactions

The oral administration of cyclacillin is generally well tolerated.

As with other penicillins, untoward reactions of the sensitivity phenomena are likely to occur, particularly in individuals who have previously demonstrated

Usual children's dosage: 50 to 100 mg/kg/day in equally spaced doses, depending on severity.

CYCLAPEN[®] (cyclacillin) for oral suspension
125 mg per 5 ml:
100 ml and 200 ml bottles
250 mg per 5 ml:
100 ml and 200 ml bottles

hypersensitivity to penicillins or in those with a history of allergy: asthma, hay fever, or urticaria.

The following adverse reactions have been reported with the use of cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS.)

Other less frequent adverse reactions which may occur and that have been reported during therapy with other penicillins are: anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

Dosage and Administration

INFECTION*	ADULTS	CHILDREN
------------	--------	----------

Respiratory Tract Infections**	250 mg q.i.d. in equally spaced doses	body weight <20 kg (44 lbs) 125 mg q.i.d. in equally spaced doses body weight >20 kg (44 lbs) 250 mg q.i.d. in equally spaced doses
--------------------------------	---------------------------------------	--

Bronchitis and Pneumonia		
Mild or Moderate Infections	250 mg q.i.d. in equally spaced doses	50 mg/kg/day q.i.d. in equally spaced doses
Chronic Infections	500 mg q.i.d. in equally spaced doses	100 mg/kg/day q.i.d. in equally spaced doses
Otitis Media	250 mg to 500 mg q.i.d. in equally spaced doses depending on severity	50 to 100 mg/kg/day in equally spaced doses depending on severity
Skin & Skin Structures	250 mg to 500 mg q.i.d. in equally spaced doses depending on severity	50 to 100 mg/kg/day in equally spaced doses depending on severity
Urinary Tract	500 mg q.i.d. in equally spaced doses	100 mg/kg/day in equally spaced doses

*As with antibiotic therapy generally, treatment should be continued for a minimum of 48 to 72 hours after the patient becomes asymptomatic or until evidence of bacterial eradication has been obtained.

**In infections caused by Group A beta-hemolytic streptococci, a minimum of 10 days of treatment is recommended to guard against the risk of rheumatic fever or glomerulonephritis.

In the treatment of chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and may be required for several months afterwards.

Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure
Based on a dosage of 500 mg q.i.d., the following adjustment in dosage interval is recommended:

Patients with a creatinine clearance of <50 ml/min need no dosage interval adjustment.

Patients with a creatinine clearance of 30-50 ml/min should receive full doses every 12 hours.

Patients with a creatinine clearance of between 15-30 ml/min should receive full doses every 18 hours.

Patients with a creatinine clearance of between 10-15 ml/min should receive full doses every 24 hours.

In patients with a creatinine clearance of <10 ml/min or serum creatinine values of >10 mg%, serum cyclacillin levels are recommended to determine both subsequent dosage and frequency.

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

Former HEW Official Issues Warning

"Wholesale federal regulation of the American health care system would fail to solve its economic problems and would be the most destructive, repressive, and reactionary step ever taken in the name of advancing the health of the people of this country."

This is the statement of a former top federal health official, Charles C. Edwards, M.D., in an article in the Sept. 28 "Impact" section of *American Medical News*. Dr. Edwards, now with the Scripps Clinic and Research Foundation, La Jolla, CA, has served as Assistant Secretary for Health, Department of Health, Education and Welfare, and Commissioner of the Food and Drug Administration.

In one of several articles in the issue discussing the real dangers to the public of more government regulation of health care, he writes: "At a minimum, such a regulatory program would lower the quality of health care to the level of mediocrity. There would be no opportunity for any institution to seek excellence, to explore new paths of health care delivery, to attract innovative personnel or even to do away with outmoded practices. The system would become so standardized and so bound up in rules dictated

from Washington that change would be virtually impossible and the struggle to win approval for something other than the prescribed norm would dissuade anyone from making the effort."

He cited the Administration's bill to put a ceiling on increases in hospital fees as a big step toward federal domination of health care.

AMA Urges Rejection of Mental Health Systems Act

Scarce federal dollars should be spent to provide services to people with serious mental illness rather than to maintain planners, statisticians and administrators, the AMA told Congress in a statement urging rejection of the Administration's Mental Health Systems Act.

The bill, under study by the Senate Human Resources Subcommittee on Health, would largely replace the Community Mental Health Centers Act as the major program funding mental health services.

The bill "does not do justice to our seriously mentally ill," the AMA said, and it does not remedy the problems of the existing community mental health centers program. The AMA outlined six principles for a future federal program.

Epilepsy Is a Major National Health Problem

Four million Americans have epilepsy in one form or another. It's more widespread than cancer, tuberculosis, muscular dystrophy, cerebral palsy and multiple sclerosis combined. It costs the nation an estimated \$4 billion each year.

Epilepsy is a major problem in Mississippi. It is estimated that between 40,000 to 50,000 people in our state alone have epilepsy. Please, will you help by knowing more about this ancient problem?

Epilepsy Can Happen to You or Anyone in Your Family at Any Time

It occurs through brain injury at birth, through diseases that damage brain tissue; through body chemical changes and imbalances; through accidents which cause head injury (an estimated 200,000 cases occur annually from auto accidents alone); and through other unknown causes.

Services That Are Available

- Personal counseling on all aspects of epilepsy
- Information on services available to epileptics in the state, such as Vocational Rehabilitation, Training, Employment, etc.
- Information on life, accident, and health insurance
- Information on legal rights, state and federal aid
- Location of seizure clinics in Mississippi
- School Alert Programs to assist teachers in detecting and effectively coping with epilepsy in the classroom
- Industrial education to help employers understand better about epilepsy
- Programs to social, professional, civic groups to make the public aware of epilepsy
- In some areas, group sessions to help parents understand and cope with their child who has epilepsy

Call or write if you need more information.

MISSISSIPPI COUNCIL ON EPILEPSY

3000 OLD CANTON ROAD, SUITE 427
JACKSON, MS 39216 (601) 362-2761



Medicaid Woes Continue

A suit by state pharmacists angered over Medicaid's reimbursement formula has apparently led the Mississippi Medicaid Commission to a study of whether state-run outlets should replace private drugstores as providers of Medicaid drug services.

The pharmacists' suit followed action by the Mississippi Medicaid Commission in July which changed pharmacy reimbursements for Medicaid prescriptions to the actual cost of the prescription plus a \$2.50 handling fee. Until then, pharmacists had been paid their charge for the prescription plus a \$2.25 handling fee.

Senator Theodore Smith of Corinth, the member of the Commission who proposed the study, was quoted by news sources as stating the lawsuit against the Commission was "... a harassment program by the druggists ..." and that the druggists were "receiving very poor legal advice."

Meanwhile, on another front, the Mississippi Medicaid Program, which overspent its budget by \$15 million last year, is apparently headed for another large deficit. Commission Director B. F. Simmons said if the current Medicaid spending pace continues the program could exceed its current \$215 million budget by about \$11 million.

Rankin County Will Get New Health Facility

The Hinds-Rankin Urban Health Innovation Project (H-RUHIP) has been awarded a Farmers Home Administration loan of \$817,000 for construction of a county health complex in Rankin County.

Construction of the complex is expected to begin this fall. H-RUHIP will occupy about two-thirds of the site and the County Health Department will occupy the rest.

News sources indicate that H-RUHIP, which is funded by the Department of Health and Human Services (DHHS), will repay the loan for the complex with DHHS funds.

H-RUHIP is presently located in the Rankin General Hospital.

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ORIGINAL PAPERS

Primary Biliary Cirrhosis (PBC)

NASIM AHMED, M.D.,* ROBERT DeCOUX, JR., M.D.,
F. ALAN THOMPSON, M.D., and JAMES L. ACHORD, M.D.
Jackson, Mississippi

PRIMARY BILIARY CIRRHOSIS (PBC) is a disease of unknown etiology involving destruction of intrahepatic bile ducts resulting in cholestasis and cirrhosis. PBC was first described in 1851 by Addison and Gull¹ and later by Hanot in 1876. Because of the high association of xanthoma and elevated serum cholesterol, MacMahon et al² called the disease xanthomatous biliary cirrhosis. The name PBC was given by Ahren in 1950 while describing his experience in 87 patients.³ However, the term PBC is inaccurate, because in the early stages the nodular regeneration is inconspicuous, and criteria for the diagnosis of cirrhosis are not fulfilled. It was pointed out by Popper⁴ that the term "chronic non-suppurative destructive cholangitis" is a better one, because it describes the pathologic picture more clearly. However, the more popular term PBC continues to be used by nearly everyone.

Pathology

To qualify as cirrhotic, liver tissue must show parenchymal destruction, fibrosis, and nodular parenchymal regeneration.⁵ Thus the term PBC is a misnomer, for at diagnosis only half of all cases meet this definition. The disease may therefore be classified into pre-cirrhotic and cirrhotic stages.

On gross inspection during the pre-cirrhotic stage, the liver appears firm, larger than normal, and is stained dark green or brown. The onset of the cirrhotic stage is marked by the appearance of small (0.5 cm) nodules. The microscopic appearance dur-

ing the pre-cirrhotic phase may be subdivided as follows: (1) The cholangitic phase, during which there is florid inflammation about the portal tracts; (2) the ductal phase, when atypical ductal proliferation is predominant; and (3) the scarring phase, when extensive fibrosis with septal formation is noted.^{9, 14, 15} It should be emphasized that on any given biopsy, different stages may be present in different areas of the liver.¹⁴

The prognosis for patients with primary biliary cirrhosis is variable and unpredictable. The cause of the condition is unknown. The authors describe evidence suggesting that an altered immune mechanism is involved, discuss characteristics of the disease, identify factors leading to diagnosis, and suggest treatments.

The most consistent lesion involves the areas surrounding portal tracts, with inflammation of the interlobular ducts being present in all cases. Parenchymal (hepatocyte) injury is usually mild and limited to the area surrounding the portal tracts, but the picture of piecemeal necrosis so characteristic of CALD is often observed. With increasing inflammatory response, frank necrosis of the duct may occur and is said to be pathognomonic of PBC. However, perhaps a more reliable histologic characteristic of PBC is a reduction in the number of bile ducts per portal area.⁹

In normal patients, or in patients with post-necrotic or secondary biliary cirrhosis, the ratio of interlobular bile ducts to portal tracts is slightly greater than 1, and the total number of portal tracts

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lacking interlobular ducts does not exceed 15% of the total number of observed portal tracts. In PBC the ratio is less than 1.0, and over 60% of portal tracts lack ducts. Many authorities consider these ratios to be most diagnostic of PBC, but two problems exist.¹⁵

First, obtaining an adequate number of portal areas to examining requires a wedge biopsy, which necessitates laparotomy. Secondly, atypical ductal proliferation is characteristic of PBC and causes much confusion as to the total number of ducts on the biopsy. In actuality, these are not true bile ducts. They are almost never associated with the hepatic arteriole or portal venule, they are usually seen at the periphery of the lobule, they usually exhibit no lumen, and most often appear in longitudinal section where true interlobular ducts usually appear in cross section. The origin of these structures is in dispute, but they almost certainly arise from hepatic cell plates in response to injury.^{9, 15}

Other histological changes seen with PBC include granuloma formation, bile stasis, and necrosis of individual hepatic cells. Granulomas, seen in roughly 30% of patients, should suggest the possibility of PBC, particularly if the clinical setting is appropriate. They are more likely to occur in the earlier stages of PBC, and are often indistinguishable from the granuloma of sarcoidosis. They may be present in regional nodes as well as in the liver itself.^{5, 15}

The occurrence of bile stasis is extremely variable, being generally absent in the earlier stages. The absence of bile stasis in the presence of elevations of the alkaline phosphatase should suggest PBC.⁹ The stasis may be centrilobular, periportal, or diffuse, but bile lakes are rare. The presence or absence of stasis correlates generally with the serum bilirubin, but there is considerable overlap.¹⁵

Single cell necrosis is universal and is usually associated with Kupfer cell hyperplasia and infiltration by polys and/or lymphs. Generally, distribution is haphazard throughout the hepatic parenchyma and present to only a mild degree, but an almost constant finding is necrosis of cells adjoining the portal tracts and disruption of the limiting plate. With continued necrosis and destruction, fibrous septae may extend from one portal area to the next or from portal area to central vein. Fatty change is rare.^{5, 9, 10, 14, 15}

The changes described above suggest, in general, either extra-hepatic obstruction or some type of hepatitis. By definition, extra-hepatic obstruction is lacking in PBC; yet the changes do not suggest the lesion of typical viral hepatitis, either. Specifically,

the inflammatory process is generally mild, focal, and rarely associated with balloon degeneration, atrophy, and lobular disarray so typically seen with viral hepatitis. Thus the condition in the pre-cirrhotic phase is often termed cholangiolytic hepatitis.

With continued inflammation, necrosis, and formation of fibrous septae, the process eventually spreads to involve adjacent portal tracts, producing a typically cirrhotic picture. However, the septae may simply end blindly or, more commonly, demarcate large elements of parenchyma where the normal anatomical relationship between the central vein and surrounding portal tracts is maintained. This is the distinguishing characteristic of the cirrhotic stage of PBC — maintenance of normal vascular architecture. In some instances, the central vein does become involved in the mass of fibrotic reaction, but this is the exception rather than the rule. The two main characteristics of the cirrhotic stage of PBC are the maintenance of normal vascular anatomy often until the very end stages of the disease and the remarkably long time required for the development of cirrhosis.¹⁵

Immunology

Although the etiology of PBC is unknown, evidence is rapidly accumulating to suggest that an altered immune mechanism — an “autoimmune response” — is involved.⁵⁻⁹

Features which suggest an altered immune response include the high female/male ratio, the occurrence in families of this rare disease, the protracted, progressive course, and the sudden appearance of disease following drug ingestion. Also, its association with other “autoimmune” diseases such as Sjogren's, CRST syndrome, RTA, and fibrosing alveolitis have been known for some time.^{8, 9}

Several markers also imply that an altered immune system is involved. These include the anti-mitochondrial antibody (AMA), the anti-smooth muscle antibody (Anti-SM), elevated levels of immunoglobulins and anti-nuclear antibodies (ANA).

The AMA has come to be considered almost diagnostic for PBC.^{8, 11} It is helpful, but far from diagnostic. The test is based on the finding in the sera of patients with PBC, antibodies to mitochondria which are non-organ and even non-species specific. Usually rat stomach or kidney is used as a source of mitochondria (antigen). These are incubated with the patient's serum (antibody). Finally, fluorescent rabbit anti-gamma G globulin is added, and if an Ag-Ab complex has formed on the rat mitochondria, fluorescence occurs — a “positive” test. By diluting the patient's sera, “titers” are obtained.¹¹

The AMA is positive in 85%-95% of patients with PBC. Once present, it tends to remain so for the duration of the illness. It is generally believed to appear early in the course of the disease, though this is not invariable. There is absolutely no correlation between the presence or absence of any of the symptoms or pathological changes of the disease and the AMA, nor is the titer of any prognostic significance.⁸

The AMA is not specific for PBC. Depending on the source, 20%-50% of patients with CALD have positive AMA's, and 10%-20% of patients with cryptogenic cirrhosis do also. A very small percentage of patients with collagen diseases, especially SLE, will be positive. Perhaps its greatest value lies in the fact that less than 5% of patients with extrahepatic biliary obstruction have positive AMA's and even fewer "normals" are positive (0.8%).^{5, 6, 8-10}

Of concern, however, is a report from Mistilis' group, in which 21 cases of extrahepatic obstruction were examined for AMA. If the obstruction was "acute" (less than three months duration), the incidence of positive AMA was as expected, i.e., very low. However, if the obstruction was "chronic" (more than three months duration), the AMA was positive in all cases, and converted to negative with relief of the obstruction.¹²

An occasional patient with viral or toxic hepatitis, hepatic malignancy, or any one of several systemic diseases (for example, sarcoid) affecting the liver may be positive, but these are quite rare with an incidence of less than 1%.

Of much less diagnostic significance are other non-specific immune markers such as the ANA and anti-SM antibody. Depending on the study, the incidence of positive ANA in PBC varies between 20%-45%, while the incidence of positive anti-SM is in the range of 10%-50%.^{9, 10}

It should be stated that most investigators believe all three of these markers represent a non-specific immune response to the initial insult(s) producing PBC, rather than being responsible themselves for the hepatic damage. None can be correlated with the duration, activity or course of the disease.

Additional evidence that altered cellular immunity is involved is suggested by: (1) the increased incidence of tuberculin negativity in patients with PBC as compared to normal controls; (2) demonstrably impaired transformation of lymphocytes in relation to phytohemagglutinin; and (3) the demonstrated cytotoxicity of PBC lymphocytes to human liver cell cultures.

There appears, however, to be no correlation be-

tween altered cellular immunity and the levels of AMA, severity of disease, histology of the disease, etc., suggesting that altered cellular immunity may be an effect rather than a cause of PBC.^{5, 6}

By using leukocyte migration indices, it is possible to consistently demonstrate cellular hypersensitivity to liver antigen in only three conditions — PBC, CALD, and cryptogenic cirrhosis.⁶ This again is evidence in favor of an abnormal immune response in these disease states. It has not been possible, however, to produce PBC experimentally by the injection of liver extracts.⁶

In a very recent article in the *New England Journal of Medicine*,¹³ it was reported that circulating immune complexes (cryoproteins of the IgM variety) are present in 90% of patients with PBC. The significance of this finding must await further investigation.

Elevated globulins are the rule rather than the exception in chronic liver disease. In PBC, approximately 70% of patients demonstrate significant elevation of the IgM fraction, while 50% show increased IgG and 10%-20% show increased IgA. The levels of immunoglobulins appear to bear little relation to the course of the disease or the presence of other immune markers.^{5, 14}

Clinical Features

The incidence of PBC is unknown. Approximately 1% of patients dying of cirrhosis have PBC, but because of the advent of sensitive laboratory tests, more and more patients are being diagnosed in the early asymptomatic stage; therefore, the discovered incidence is gradually rising.

PBC occurs most frequently in females in the fourth to sixth decades of life. Most series^{9, 16, 17} report a female preponderance of 85%-90% for reasons unknown. The diagnosis in men should be made reluctantly unless other evidence is particularly strong. Surgical exploration or PTC to establish the patency of biliary passages is indicated more often in men than in women. The usual onset of PBC is insidious. An acute onset of illness is uncommon. A history of exposure to jaundiced patients, blood transfusions, toxic agents or cholestatic drugs is not usual. Rarely, the onset of symptoms occurs during pregnancy.

Presentation

A gradual onset of pruritus, followed by jaundice, is by far the most frequent presentation. In 100 patients with PBC reported by Sherlock,¹⁶ 57 cases presented as pruritus without jaundice. Such patients were referred initially to a dermatologist. In 16 pa-

tients, jaundice didn't develop, even ten years after the onset of itching. In 14 patients, jaundice followed within six months of pruritus, but in 27, the jaundice was delayed for one to twenty years. In the latter group, jaundice usually appeared within two years of the pruritus. In about one-fourth, jaundice and pruritus started simultaneously. In five patients, pruritus appeared during pregnancy and was confused with cholestatic jaundice of pregnancy. Icterus continued after delivery, leading to the diagnosis of PBC. Jaundice preceding pruritus is extremely unusual (two patients only) and jaundice without pruritus at any time is very rare.

The absence of jaundice may imply that hepatocellular functions remain good. In another series reported by Baggenstoss,⁹ who followed a few patients for more than ten years, jaundice never developed. With progression of the disease, the jaundice usually becomes intense. Some have reported that early persistent jaundice is a poor prognostic sign.⁹

Bleeding from esophageal varices has been reported as a frequent initial presenting complaint in some studies,²⁵ but in other series it is rare.¹⁶ Portal hypertension is a common late complication.

Pigmentation of the skin appears as the pruritus persists and is often darkest in areas accessible to scratching. In a patient who has persistently high serum lipids, xanthlasma and plane and tuberous xanthomata are found. Xanthlasma frequently occurs when the total serum lipid level is greater than 1,300 mg/100 cc for several months. When the level goes higher than 2,000 mg/100 cc,^{3,9} plane and tuberous xanthomata develop. Xanthomata develop gradually and resolve slowly as hepatic function deteriorates. The increase in serum lipids must persist for several months before skin deposition is apparent; therefore the xanthomata may be absent in the early part of the disease.

Diarrhea may be a complaint, and even in the absence of clinical jaundice, steatorrhea may be present. Reduced secretion of bile salts into the intestinal lumen results in impaired digestion of fat and in excess fecal fat excretion. Fat soluble vitamins A, D and K are poorly absorbed, and patients may develop complications related to lack of these vitamins. For example, due to deficiency of vitamin K, patients may complain of easy bruising and may develop hematomata and a prolonged prothrombin time. Because liver cell function is generally good, the latter is readily corrected in the early part of the disease. Malabsorption of vitamin D leads to de-

pressed absorption of calcium. Osteomalacia may result and osteoporosis may also occur, leading to bony fractures with minor trauma. Malabsorption of vitamin A may lead to night blindness. Malabsorption may not be entirely due to reduced bile salt secretions. In a recent report published in *Lancet*,²¹ four patients with asymptomatic PBC and malabsorption were found to have celiac disease. All patients responded to gluten free diet and remained well two years after the initial diagnosis. The authors of that article speculate that celiac disease should be considered as a possible cause of unexplained weight loss in PBC. Obviously, we need more studies to clarify this association.

Associated diseases, particularly those with immunologic disturbance, are not uncommon. The sicca complex of dry eyes and mouth with or without arthritis (suggestive of Sjogren Syndrome) has been reported in one series to occur in as many as 70% of patients.²³ The associated conditions are rheumatoid arthritis and autoimmune thyroiditis. The so-called CRST syndrome has also been reported in patients with PBC.²⁴

Laboratory

Biochemically, the picture is that of prolonged cholestasis. The serum bilirubin level is usually between 1 and 5 mg/100 ml. The alkaline phosphatase is always markedly elevated, often to more than 500 IU (in about 75%). Abnormally high 5' nucleotidase also occurs. The serum bilirubin level fluctuates and may remain within normal limits for months or years. PBC should be diagnosed reluctantly if serum alkaline phosphatase is less than 300 IU.

Serum IgM level is often increased in cholestasis, particularly in PBC. It has been used to differentiate PBC from extrahepatic biliary obstruction. In one series of 100 patients, one quarter had normal IgM level. The combination of a high serum IgM with a very high alkaline phosphatase and a normal or only moderately increased serum bilirubin should suggest the diagnosis of PBC. AMA test is positive in about 90% of patients with PBC; the test, however, is not organ or species specific.

In another study the AMA was detected in 84% of 188 patients with PBC and only 4 of 180 with extrahepatic obstruction. Particular care has to be taken in making a diagnosis of PBC if AMA test is negative. Unless needle biopsy is diagnostic, extrahepatic obstruction must be ruled out if AMA is negative.

PBC is now being diagnosed in anicteric stage. Asymptomatic primary biliary cirrhosis has been reported.²¹ The diagnosis was made on the basis of

high alkaline phosphatase, positive AMA and suggestive liver biopsy. Hepatic histologic findings during asymptomatic phase remain those of classic stage 1 PBC, with the serum mitochondria antibody test strongly positive. In the majority of patients it is probable that PBC has been present for many months, or indeed years, before becoming symptomatic.¹⁷

Diagnosis

Diagnosis is relatively easy if the condition is kept in mind. The middle-aged woman presenting with pruritus, with or without jaundice and showing hepatomegaly, cholestatic results of biochemical tests, positive mitochondrial antibody and a compatible hepatic histology, presents an unmistakable picture. Diagnostic difficulties arise in the male, in those where presentation is more acute and jaundice more severe, and in those with a negative AMA test.

Differential Diagnosis^{9, 16-18, 20}

Obstructive jaundice — To make a diagnosis of PBC, it is imperative that obstruction of the biliary tree be ruled out, i.e.; common duct stone, carcinoma of the head of the pancreas or papilla of Vater, etc. The clinical picture is very helpful: pain is a common feature of both common duct stone and carcinoma of the head of the pancreas. Jaundice is usually of early onset and deepens rapidly in hepatic obstruction. The finding of a palpable distended gallbladder is generally diagnostic of a malignant extrahepatic obstruction.

Carcinoma of the common hepatic duct or one of its branches — This may present a more difficult problem, but again, jaundice is usually early in onset and deepens rapidly.

Stricture of extrahepatic biliary tree — Prior surgery of the biliary tract or a complicated cholecystectomy is a tip-off. Chills and fever, when present, are indicative of cholangitis.

Chronic Hepatitis

Early in the course of chronic hepatitis (chronic active hepatitis or persistent variety), sometimes bile duct destruction may be present. The clinical and laboratory picture is variable and in such cases, it is sometimes impossible to distinguish CALD from PBC. The physician is on the horns of a therapeutic dilemma in these "overlap" cases. The prognosis in such patients as to transition to cirrhosis is worse than when bile duct destruction is not present.²⁰

Sclerosing cholangitis — With or without ulcerative colitis, this involves the larger bile ducts as well as the smaller ones, and centrilobular rather than peripheral cholestasis is present.

Drug induced cholestasis — A history of ingestion is helpful, onset is more acute, and AMA test is negative or only weakly positive. Histological changes are also different. Organic arsenicals, chlorpromazine, sulfonamides, oral contraceptives, and less frequently, other drugs have been implicated. Most of these drugs cause cholestasis on the basis of individual hypersensitivity and may be associated with peripheral eosinophilia.

Alcoholic hepatitis — May present with a clinical and biochemical picture of cholestasis, but liver biopsy makes the distinction.

Acute viral hepatitis — Occasionally presents with a clinical picture of cholestasis. A short course of illness with complete recovery and the histological hallmarks of viral hepatitis are helpful in the diagnosis.

Treatment

The treatment of PBC is disappointing and is primarily directed at the relief of symptoms and the prevention of some of its complications. No therapy known to date has been proven to alter the natural course of the disease.

Corticosteroids should not be given to patients with PBC because of the development of serious side effects, especially osteoporosis. Azathioprine treatment has been proposed. Between 1968 and 1974 this drug was used in a prospective study of 45 patients with symptomatic pre-cirrhotic PBC. Half were not treated and the other half received 2 mg/kg body weight of azathioprine. Throughout the six-year follow-up the serum alkaline phosphatase, bilirubin, cholesterol, albumin, and IgM levels showed no significant change from the control group. However, titers of serum mitochondrial antibodies tended to become more negative in the treated group. Subjectively the azathioprine population suffered less pruritus. Survival, unfortunately, was not prolonged. Thus, we have no good data to indicate that it adds to the therapy of PBC.^{26, 28}

An alternative mode of therapy is D-penicillamine. In PBC, liver copper concentrations are frequently increased in the same range found in Wilson's Disease. Failure of biliary copper excretion leads to liver damage and ultimately to cirrhosis and an increase in collagen synthesis. D-penicillamine may be beneficial because it reduces the amount of collagen and the proportion of insoluble to soluble collagen in human skin. However, it is not known whether D-penicillamine will prevent collagen deposition in PBC, as the predominant type of cross-linking has not been defined. Sheila Sherlock reported a randomized, double blind control trial using

D-penicillamine.²⁷ After one year she reported no significant change in serum bilirubin or alkaline phosphatase, but that on the repeat liver biopsy the liver copper concentration had fallen by a significant degree in the treated group. Histologically, there was improvement in cholestasis, but the degree of inflammation and necrosis, as well as the histologic stage, remained similar in both groups. Approximately one-third of the treated patients had to discontinue the drug because of side effects, i.e. dyspepsia, taste impairment, skin rashes and proteinuria. Because of variable natural history, many years must pass before we know whether cirrhosis, portal hypertension, and liver failure are delayed and survival prolonged.

Pruritus is traditionally felt to be due to the deposition of bile salts in the skin. The anion-exchange resin, cholestyramine, binds bile salts in the gut, interrupting the intrahepatic circulation and thereby inducing a decrease in the level of serum bile acids. Occasionally, when this fails, surgical drainage of the bile duct will succeed.^{30, 31} It is also worth noting that if bile flow is completely obstructed, cholestyramine fails to relieve pruritus. The smallest effective amount of cholestyramine should be used. Methyltestosterone and norethandrolone can relieve pruritus, but both cause an elevation of serum bilirubin and alkaline phosphatase levels and are not recommended.

When bleeding from esophageal varices occurs early in the disease, portal systemic shunting is well tolerated. The immediate prognosis is improved, but the hepatic disease is unaltered. Construction of the portal-systemic shunt for portal hypertension with esophageal hemorrhage and hepatocellular failure carries the same high risk as it would in any other patient with portal hypertension and hepatic failure.

Prognosis

The prognosis is variable and unpredictable. The condition is being diagnosed much earlier today and hence the prognosis seems to be getting better. Deep jaundice is a bad sign. The disappearance of xanthomas and pruritus implies the development of hepatocellular failure. When overt signs of hepatocellular failure develop, such as ascites, pre-coma and bleeding, the course is rapidly downhill. Asymptomatic, anicteric, or mildly icteric patients may continue for many years in relatively good health.¹⁷

★★★

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The staff and officers of MSMA wish for all members and their families a most joyous holiday season and a happy and healthy year in 1980.

Radiologic Seminar CXC VII: Triple Ureters

PHILIP E. CRANSTON, M.D.

Jackson, Mississippi

A URETERAL TRIPLICATION is one of the rarest anomalies of the urinary tract. There is an increased incidence of other congenital anomalies with this entity. As with the more common duplicated ureter, there is associated increased chance for infection and calculus formation.

There have been 60 cases of triple ureter reported in the literature. This case is a type III triple ureter (see Figure 1). According to the accepted Smith classification (see Figure 2), there are four types of triplication. Type I has three ureters with three orifices. Type II has a double ureter with one bifid (only two ureteral orifices). Type III is a trifid ureter with three ureters but only one orifice. Type IV is a double ureter with one ureter having a distal "inverted Y" bifurcation. Two ureters arise from the kidney, but there are three orifices.¹

Ureteral triplication is more common in women and more common on the left. There is felt to be a hereditary tendency for this entity. More than half the patients will present with urinary tract infection symptoms.

Ureteral ectopia has been seen in about 20% of patients, mostly in women, and can cause incontinence. The location of the ectopic ureteral orifice was always with the distribution of the Wolffian duct derivatives. In females the locations include bladder, trigone, urethra, vagina, and probably uterus or cervix. In males, the areas are bladder, trigone, seminal

vesicles, supra-sphincteric urethra, epididymis, and vas deferens. Complete triplication has a higher incidence of ectopia.²



Figure 1. Note three right ureters at the L4-L5 interspace level between arrow and arrowhead. Only one ureter is noted at the pelvis level (lower arrow).

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University of Mississippi
Medical Center, Jackson, MS.

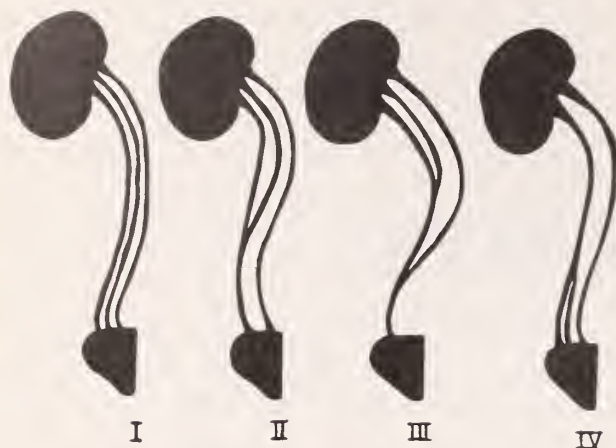


Figure 2. Smith's classification of triple ureters. Type I, II and III have similar frequencies: 26%, 23% and 34%, respectively. Type IV has a 3% reported frequency.

In conclusion, although triplicate ureters are of interest as a rarity, their clinical significance does not differ from that of duplicate ureters. These are frequently accompanied by other congenital anomalies and drainage problems with resulting obstruction, infection, and calculus formation.³ ★★★

2500 North State St. (39216)

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Mississippi State Medical Association Auxiliary

1980 Legislative Day

All of us see things happening daily in our state and nation that distress us. Some of these things affect us directly by adversely influencing the orderly practice of quality medicine by our spouses. This in turn affects all the citizens of our state, who deserve the best medical care. It, therefore, behooves us to educate ourselves to the problems and then to address and try to solve the problems. One of the best methods is through the legislative process.

The Mississippi State Medical Association Auxiliary members are presently in the process of contacting their senators and representatives to attend a luncheon at the Coliseum Ramada Inn in Jackson in February. This luncheon will be in conjunction with the Auxiliary Board meeting, the theme of which is "A Day with the Legislature." We plan to attend a session of the Senate or House of Representatives, or possibly both, if the schedules permit, in order to acquaint ourselves with the way our legislative system works. Since we have just finished with the fall elections and have a new group of state officials and legislators in office, this will be an opportune time to meet them and let them know of our support and interest in their elected positions. By becoming better educated in the area of policy making, we can better serve the people of Mississippi by bringing them the best medical care available anywhere. We are planning to have some of our newly elected state officials address the group as part of our program for the day.

Through the efforts of the Mississippi State Medical Association and MSMAA, we were able to influence legislation in 1979. A generic substitution bill was enacted to encourage prescribing and dispensing of lower cost drugs. This law will assist consumers in cutting their health care costs. Also, legislation was passed which requires private insurance companies to provide coverage for the transportation of high risk newborns to a specialized treatment facility. This legislation should help improve care of high risk newborns in our state. A further help to newborns came in the form of a MSMA bill which provides for genetic screening of babies in an effort to reduce the incidence of mental retardation. This year we hope to obtain funding to make this service available to indigents. Through the efforts of physicians across the state, the bill which set up the Mississippi Health Care Commission was significantly altered to insure provider representation and to isolate the commission from day to day political pressures.

Many of our health care legislation proposals in 1980 have grown out of a health needs study, over two years in the making. Recommendations for health legislation contained in the study were adopted at the 1979 annual meeting of MSMA's House of Delegates.

As you can see, we do have a significant impact on the way medicine is practiced in this state. I would like to urge each and every member of MSMA and MSMAA to become more involved in the field of medical legislation. Let your senators and representatives know your feelings on important topics. I would also encourage the attendance of all MSMAA members at our "Day With the Legislature." More details will be announced.

★★★

MRS. BEN F. MARTIN
Legislative Chairman
MSMA Auxiliary





The President Speaking

Let's Continue the Best in Medical Care

GERALD P. GABLE, M.D.
Hattiesburg, Mississippi

During this holiday season of cheer and hope it seems appropriate to reflect upon the many good things medical care has accomplished.

I think particularly of a news report I heard the other day to the effect that there are now some 13,000 persons in our country over 100 years of age, and that the life expectancy for a person born this year is 73 years.

This is amazing to comprehend, particularly when one considers that at the turn of this century life expectancy was 47 years, and anyone over 100 years of age was considered a medical oddity.

An explosion in medical technology has made possible this lengthening of our most precious asset — human life. Such technology has come about because we have cared enough to do our very best with respect to medical care in this country.

There has not been a lack of resultant socioeconomic issues. Medical care is becoming more expensive. The aged are faced with social problems which were unheard of a few decades ago.

As we end the 1970s and look towards the '80s, let us hope that we can solve the socioeconomic issues of medical care while continuing our great advances in medical technology.

Best wishes to all of you for a very Merry Christmas and a happy new year. ★★★

**Dr. Caldwell
Will Be Missed**

MSMA president-elect, Robert S. Caldwell, died Nov. 5 after a brief illness.

Bob Caldwell devoted much effort and many hours to the activities of this association. He held numerous leadership positions, including a term as chairman of MSMA's Board of Trustees from 1976-1979. He was elected president-elect of MSMA at the 1979 annual session of the association.

As chairman of MSMA's Board of Trustees for the past three years, Bob Caldwell guided policy decisions of the association in several areas of acute concern to the medical profession in Mississippi. He had a knack for getting things done with a minimum of personal publicity and with a maximum of empathy for people.

Bob Caldwell was looking forward to his year as president of the association. He regarded it as an opportunity to lead the association in its response to issues facing the profession. His leadership, companionship and devotion will be sorely missed. — C.L.M.

Not a Matter of Taking X-rays

The awarding of the 1979 Nobel Prize in medicine to the inventors of the computer assisted tomography (CAT) scanner brings into sharp focus the current issue of medical technology versus cost.

The CAT scanner has become at the same time a symbol of the best that modern medicine has to offer and of the phenomenal impact such technology has on the cost of medical care.

The machine, which costs from \$500,000 to \$1 million, produces diagnostic x-rays of organs of the body never before possible. No doubt in many cases it has replaced major surgery and other relatively high risk procedures.

In its citation of the inventors of the CAT scanner, the Karolinka Institute, which awards the Nobel Prizes, said, "It is no exaggeration to state that no

other method within x-ray diagnostics within such a short period of time has led to such remarkable advances in research and in a multiple of applications as computer assisted tomography."

The Carter Administration's Hospital Cost Containment Act would place a ceiling on hospital expenditures and in effect ration the number of CAT scanners and other expensive diagnostic instruments available to physicians and their patients. This would be in keeping with the views of "health planners" who point out that California now has more CAT scanners than Britain, which has more than twice as many people.

Perhaps the answer to these cost conscious critics of health care was best stated by one of the inventors of the CAT scanner, who noted its lifesaving attributes and stated, "it's not just a matter of taking x-rays." — C.L.M.

Gallium 67 Scan for Pulmonary Lesions

The differentiation of solitary pulmonary lesions found on chest x-ray continues to be a source of consternation to the examining physician. A determination must be made as to whether the lesion is benign or malignant. If malignant, is it primary lung cancer or metastatic cancer from a malignancy located elsewhere in the body? The usual noninvasive diagnostic measures may fail to produce a definitive diagnosis.

Of recent interest to the chest physician is the availability of a newer diagnostic tool — Gallium 67 scan. If a single lesion found on chest x-ray is gallium positive, there is a 91% chance that the tumor is primary carcinoma of the lung. If the lesion is gallium negative, there is a 76% probability that the lesion is either a metastatic tumor or a benign lesion. This still leaves a 24% possibility of primary lung cancer, but should direct attention toward discovering a primary site located elsewhere or careful consideration that the lesion is benign.

Further, gallium scanning has recently been shown to be of value in determining the presence of

EDITORIALS / Continued

mediastinal or contralateral hilar lymph node metastasis. If the primary lung tumor is gallium positive and the mediastinal nodes are gallium negative, there is a 67% probability that the nodes do not contain metastatic tumor. Should the mediastinal nodes be gallium positive, mediastinoscopy with biopsy should lead to a definitive histological diagnosis.

Gallium scans are also of value in determining the presence of distant metastasis from carcinoma of the lung. If the primary tumor is gallium positive, any extrathoracic site of gallium uptake should be biopsied, as 90% of these are metastatic foci.

Although gallium scanning is one of the newer diagnostic tools, as further experience in its use is gathered, this procedure should take its rightful place in the diagnosis of solitary lung lesions.

GEORGE H. MARTIN, M.D.
Associate Editor
Vicksburg, MS

Journal MSMA: The Challenge Continues

This issue of JOURNAL MSMA concludes twenty years of publication, an event which merits praise and prompts re-examination. The goals and purposes of JOURNAL MSMA were outlined in an editorial in the premier issue. The article, entitled "Volume 1, Number 1," declared:

With this first issue, a new state medical journal is born and the Mississippi State Medical Association has initiated another service for and in behalf of its members. This has been neither a casual nor lightly considered undertaking, for there are grave responsibilities upon journalism's pen whether wielded for the scientific or popular press. Moreover, this Journal enters distinguished company on the day of its birth because the American scientific press, as is true of the American newspaper and magazine press, is without a peer.

The author concluded, "Thus, JOURNAL MSMA must earn its place by the exercise of responsibility, diligence, and dedication."

Has JOURNAL MSMA earned its place? If winning awards is a measure of success, the answer is "yes." JOURNAL MSMA has been recognized for excellence by journalistic and medical organizations. If continued activity and growth are standards, the answer is "yes." Your Board of Trustees continues to express approval of the publication, advertisers continue to buy our pages, and new subscribers — both

medical and nonmedical — continue to enroll. If "readership" determines a publication's success, the answer is again in the affirmative. Our own readership survey and several national surveys of state medical journals reveal that JOURNAL MSMA consistently scores high marks in most categories of study.

But there is another measure of a publication's effectiveness. That is a feeling of pride and purpose on the part of the people the publication serves. Although this criterion is intangible, it is expressed in measurable ways — in the active participation of readers by submitting scientific papers, by reviewing books, by expressing opinions in editorials, by writing letters of criticism or commendation, by offering information, by making suggestions to the Editorial Board.

JOURNAL MSMA has a long history of active membership participation. Its pages have recorded information relating to every area of medicine — scientific, economic, social, political and organizational. The events recounted in these pages provide a history of medicine in Mississippi for the past twenty years, and the concerns voiced in these pages give testimony to the sincere dedication of Mississippi physicians to the profession.

By these measurable standards, JOURNAL MSMA has, indeed, exercised responsibility, diligence and dedication — and it has "earned its place." It is worthy of a renewed commitment. It must continue to educate, to report, to inquire, to stimulate action, to identify problems and to seek solutions. The association has charged it with this responsibility; the times demand that the responsibility be performed effectively.

The editors and members of your publications committee extend appreciation for your participation and echo a challenge put forth in another of JOURNAL MSMA's first issues. In "A Pledge for Progress," which appeared in the June 1960 issue, Dr. Thomas J. Marland, editor, remarked: "We hope to stimulate a desire to write that will extend into every corner of Mississippi . . . the greatest stimulus to thought is to write. There is not a doctor in Mississippi who does not have a contribution to make. . . . The obligation of medical journalism touches all of us. It must be sensitive to the demands of an ever-changing science. It must be tuned in to the pressures both from within and without the medical fraternity. It must be ethical in its intent and method. These are some of the attitudes of your editors that they will use in performing their duties. Help us in our task." — P.W.S.

Filling a Health Care Need

(Ed. Note: The following editorial is reprinted from the Jackson Clarion-Ledger.)

In 1976, all except six of Mississippi's 82 counties were classified as medically underserved, according to the *Mississippi State Medical Association Journal*. Fifty-seven of these had physician shortages.

While advances have been made in some areas of health care since that time, the shortage of doctors continues.

One way to help improve health services is the use of nurse practitioners. At present there are about 70 sponsored by the state board of health in the state's rural areas. More are needed, not only in public health but in private medical care.

Although nurse practitioners are not physicians, they are beginning to fill a gap, mostly in the preventive sphere, in the care of patients who do not require a doctor. Trained in various fields beyond those of certified nurses, their duties range from being midwives for women with uncomplicated pregnancies to giving family planning counseling to giving routine examinations and prescriptions. The work of each is overseen by a doctor.

The success of nurse practitioners depends on the relationship and coordination between the practitioner and the physician. Many private physicians still do not accept nurse practitioners as a way of complementing their services, viewing them as competition and/or allocating to them only regular nursing duties. However, recipients of health care need both the medical skills of the physician and the psychological-social assistance, including health care education, offered by the nurse practitioner.

Training physicians and nurse practitioners together may overcome the hesitancy of the former to hire and use to the fullest advantage nurse practitioners. In any case, the day to day health care needs of Mississippi are too great to ignore this potential. And these needs will continue to grow.

Although some fear the increasing use of nurse practitioners will make an already acute nurse shortage more severe, the more challenging work of the practitioner can only enhance the profession and may indeed attract more recruits into the nursing field.

More nurse practitioners, closely supervised, working in rural Mississippi will help compensate for the maldistribution of physicians, whose numbers are now clustered in urban centers. The move also will help bring the state's health care up to par with the rest of the nation.

POSTGRADUATE CALENDAR

January 7-11, 1980

PRACTICE OF ELECTROCARDIOGRAPHY
University Medical Center, Jackson

Sponsored by the University of Mississippi School of Medicine Department of Medicine and the Medical Center Division of Continuing Health Professional Education.

Coordinator: Thomas M. Blake, M.D., professor of medicine and chief of cardiology and electrocardiography, University of Mississippi School of Medicine.

Discussions will center on the mechanisms, structure and function of electrocardiography. New methods will be discussed with emphasis on the computer. This course is for physicians who use electrocardiography in their daily work. Fee: \$150. Credit: 40 contact hours, 4 CEU, Category 1 of the AMA Physician's Recognition Award, AAFP credit applied for.

Medico-Legal Brief

Physician's Malpractice Insurance Policy Cancelled Because of Concealment of Facts

A malpractice insurance policy was null and void because the physician to whom it was issued misrepresented and concealed that he had moved from Alabama to Louisiana and had licensing problems with the state, a federal appellate court in Louisiana ruled.

The physician obtained malpractice insurance in 1972, while he was practicing in Alabama. The policy was renewed in 1973. Later, the physician moved to Louisiana, where he was issued a temporary permit, which expired in June 1974 and could not be renewed. The Louisiana State Board of Medical examiners then twice rejected his application for a permanent permit. A Louisiana court ruled that the physician had no legal right to practice medicine after his temporary permit expired.

In June 1974, the physician, by then a Louisiana resident, requested renewal of his malpractice policy on stationery bearing his former Alabama address. The policy was renewed, and the policy and premium were mailed to him at the Alabama address. The policy listed his office address in Alabama and stated that he was registered and licensed to practice

in Alabama. At no time did he inform the insurance company of his move to Louisiana or of his license problems in that state.

The insurance company learned of those facts when it was informed of a malpractice suit against him. The company then cancelled the policy and returned the premium to the physician. The company also filed suit to declare the policy null and void because of the misrepresentation and omissions made by the physician. A trial court granted summary judgment for the insurance company, and the physician appealed.

Affirming the decision, the federal appellate court said that the policy was null and void. Both the policy underwriter and the agent stated that the policy would not have been renewed if the true circumstances had been known. Because the policy was renewed on the strength of the physician's misrepresentations, it was void, the court said. — *Aetna Casualty & Surety Company v. Evers*, 590 F.2d 600 (C.A.5, La., Feb. 28, 1979)

PHYSICIANS

One of America's largest health care corporations is currently seeking both a full and part time physician for our Plasma Donor Center located in Biloxi, MS. Responsibilities will include performing physicals in conjunction with donor screening and evaluation. The part time position would provide support when regular staff physicians are on vacation.

Our requirements are flexible and we will consider licensed but non-practicing physicians as well as those desiring to work on a consulting basis. We offer excellent working environment and a highly competitive salary.

For further information, please call collect or send curriculum vitae to **Ora Lee Long**.



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Review A Book

The following books have been received by the MSMA Headquarters Office. Medical readers (members of MSMA) interested in reviewing any of these volumes should address their requests to Editor, THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, P. O. Box 5229, Jackson 39216. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to the JOURNAL a review for publication.

Correlative Neuroanatomy and Functional Neurology: Seventeenth Edition. By Joseph G. Chusid, M.D. Los Altos: Lange Medical Publications, 1979.

Review of Medical Physiology: Ninth Edition. By W. F. Ganong, M.D. Los Altos: Lange Medical Publications, 1979.

Review of Physiological Chemistry: Seventeenth Edition. By H. A. Harper, Ph.D., Victor W. Rodwell, Ph.D., and Peter A. Mayes, Ph.D. Los Altos: Lange Medical Publications, 1979. \$14.50.

Current Surgical Diagnosis and Treatment: Fourth Edition. By J. Englebert Dunphy, M.D., and Lawrence W. Way, M.D. Los Altos: Lange Medical Publications, 1979. \$19.00.

Clinical Cardiology: Second Edition. By Maurice Sokolow, M.D., and Malcolm B. McIlroy, M.D. Los Altos: Lange Medical Publications, 1979. \$17.50.

Handbook of Institutional Pharmacy. By Mickey C. Smith, Ph.D., and Thomas R. Brown, Pharm. D. Baltimore: Williams & Wilkins, 1979. \$27.95.

Brain Surgeon. By Lawrence Shainberg. Philadelphia: J. B. Lippincott Co., 1979. \$10.95.

Review of Allied Health Education. By Joseph Hamberg. University Press of Kentucky, 1979. \$7.50.

The Truth About Senility – And How to Avoid It. By Lawrence Galton. New York: T. Y. Crowell, 1979. \$9.95.

What You Should Know About Medical Lab Tests. By Bernard Kliman, M.D., and Raymond Vermett. New York: T. Y. Crowell, 1979. \$9.95.

The Courage to Live. By Ari Kiev, M.D. New York: T. Y. Crowell, 1979. \$7.95.

MEDICAL ORGANIZATION

Thirteen Jails Will Participate In MSMA Project

Thirteen Mississippi jails have applied for technical assistance under MSMA's Jail Health Project, and all have been approved for the program, according to Virginia S. Tolbert, M.D., chairman of the advisory committee, which met last month. Dr. Tolbert emphasized the importance of local medical society involvement in improving a jail's health care system, and announced that an informational program is available for local society meetings.

The selected jails represent a cross section of rural and urban, small and large jails from across the state. Two city jails are included in the project — Greenville and Tupelo. County jails which will participate are: Adams, Amite, Claiborne, Coahoma, Copiah, Harrison, Jones, Lowndes, Newton, Panola and Warren. The individual facilities will attempt to upgrade their standards of health care delivery by utilizing available information and funds, by training jailers and by cooperating with local agencies, volunteer physicians and other health care professionals.

Dr. Tolbert reported on the AMA Third National Conference on Medical Care and Health Services in Correctional Institutions, which was held in Chicago last month. During the first phase of operation, the AMA Jail Health Project has resulted in a 70% increase in the overall availability of seven of the most important health care services. Following implementation of the AMA jail health standards, there was a fourfold improvement in early detection of illness, including communicable diseases, through screening of inmates on admission followed by full physical examination. Now in the second stage, the project includes approximately 350 jails in 22 states and Puerto Rico.

Dr. Pierce Appointed To Health Commission

Patrick Pierce, M.D., of Gulfport, has been appointed to the Mississippi Health Care Commission by Chief Justice Neville Patterson of the Mississippi Supreme Court.

Justice Patterson is one of five state officials who may make appointments to the commission, which oversees certificate of need applications for health facilities in the state.

Dr. Pierce succeeds Dr. Jack Atkinson of Brookhaven, who was chairman of the commission until his accidental death in a car-train collision in September.

A Biloxi native, Dr. Pierce earned his medical degree at the University of Tennessee Medical School, and he is a graduate of the Tulane University Graduate School of Medicine. The Gulfport ophthalmologist is a member of MSMA and a former president of the Mississippi EENT Association.

AAPS Elects Dr. Caine

Curtis W. Caine, M.D., of Jackson was elected president-elect of the Association of American Physicians and Surgeons at its 36th annual convention in Charleston, SC. Previously he has served as secretary of the organization, speaker of the House of Delegates, delegate and director.

A New Orleans native, Dr. Caine received his M.D. degree from Tulane University School of Medicine. He has practiced in Jackson since 1948. A member of many local, state, national and international professional organizations, Dr. Caine is clinical assistant professor of anesthesiology at the University of Mississippi School of Medicine.

TV Show Focuses On Health Care Costs



MSMA president Dr. Gerald P. Gable, center, and Blue Cross-Blue Shield president W. Chandler Mosley, right, are interviewed by Howard Lett for a television program, "Lett's Look At It," which was broadcast Nov. 12 on Mississippi ETV stations. The program explored the rising costs of health care. The two health care spokesmen identified causes of the problem and described programs which are underway to contain rising costs.

FTC Ads in Mississippi Are Not Likely

A review of news reports concerning the FTC's edict on physician advertising and comments from MSMA members indicate that advertising rates will not be going up in the state because of an overwhelming demand for space from the medical profession.

Apparently most of the state's physicians reacted to the FTC's action as being just another intrusion by the federal bureaucracy into areas where it has no business.

Most physicians seemed to feel that advertising would be repugnant because "good physicians" are known to their patients and peers by "word of mouth." "This is the way it will always be no matter what the FTC or any other government bureaucrat decides," said one MSMA member.

Dr. Hardy Is Named President-Elect of ACOS

Dr. James D. Hardy, chairman of the Department of Surgery at the University of Mississippi Medical Center, has been named president-elect of the American College of Surgeons.

He assumed the office at the group's annual meeting in Chicago. In 1980, he will automatically move to the presidency of the 42,000-member organization.

The Birmingham native is an alumnus of the University of Alabama and received the M.D. from the University of Pennsylvania.

Dr. Hardy is past president of the American Surgical Association, the Society of University Surgeons, the Society of Surgical Chairmen, the Southern Surgical Association, and the Society for Surgery of the Alimentary Tract, of which he was a founding member. He was also a founding member of the International Surgical Group, and currently is president of the United States Chapter of the International Society of Surgery. He is one of the five regular members of the Executive Committee of the International Society of Surgeons with headquarters in Brussels, Belgium, and has also been a member of the Council of the American Association for Thoracic Surgery and vice-chairman of the American Board of Surgery.

Dr. Hardy has been professor of surgery and department chairman since the Medical Center opened in 1955. He was recognized for his contributions to medical education, care and research and for distinguished service to the state as a 1968 recipient of the First Federal Foundation Award.

Registration Exceeds 300 At Perinatal Course



Among panel members for discussions during the Nov. 1-2 Mississippi Perinatal Postgraduate Course sponsored by the University of Mississippi Medical Center were, from left, Dr. John F. Huddleston, associate professor of obstetrics and gynecology and maternal and fetal medicine division director at the University of Alabama School of Medicine, and Dr. Philip G. Rhodes, UMC associate professor of pediatrics and newborn medicine division chief. More than 300 physicians, nurses and other health professionals from across the southeast attended the two-day conference.

ACOS Officers Honor Dr. Hardy



Officers of the Mississippi Chapter of the American College of Surgeons were at the University of Mississippi Medical Center Nov. 1 to recognize Dr. James D. Hardy on his election to president-elect of the American College of Surgeons. On hand were, from left, Dr. Hardy; Dr. W. Briggs Hopson, Jr., of Vicksburg, president of the Mississippi Chapter of the American College of Surgeons; Dr. Richard J. Field, Jr., of Centreville, retiring chapter governor; and Dr. Raymond S. Martin, Jr., of Jackson, incoming chapter governor.

In therapy of skin and skin structure infections
due to susceptible strains of staphylococci and/or streptococci...

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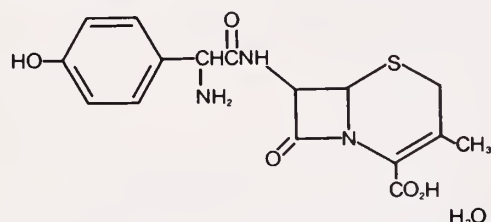
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References:

1. Data on file, Mead Johnson Pharmaceutical Division.
2. Gotley MS: To be taken as directed. *J Roy Coll Gen Pract* 16:39, 1968.

DESCRIPTION: DURICEF[®] (cefadroxil monohydrate) is a semisynthetic cephalosporin antibiotic intended for oral administration. It is a white to yellowish-white crystalline powder. It is soluble in water and it is acid-stable. It is chemically designated as 7-[[D-2-amino-2-(4-hydroxyphenyl)acetyl]amino]-3-methyl-8-oxo-5-thia-1-azabicyclo [4.2.0]oct-2-ene-2-carboxylic acid monohydrate. It has the following structural formula:



Clinical Pharmacology—DURICEF (cefadroxil monohydrate) is rapidly absorbed after oral administration. Following single doses of 500 and 1000 mg., average peak serum concentrations were approximately 16 and 28 mcg./ml., respectively. Measurable levels were present 12 hours after administration. Over 90 percent of the drug is excreted unchanged in the urine within eight hours. Peak urine concentrations are approximately 1800 mcg./ml. during the period following a single 500 mg. oral dose. Increases in dosage generally produce a proportionate increase in DURICEF urinary concentration. The urine antibiotic concentration, following a 1 gm. dose, was maintained well above the MIC of susceptible urinary pathogens for 20 to 22 hours.

MICROBIOLOGY: *In vitro* tests demonstrate that the cephalosporins are bactericidal because of their inhibition of cell-wall synthesis. DURICEF is active against the following organisms *in vitro*:

Beta-hemolytic streptococci
Staphylococci, including coagulase-positive, coagulase-negative, and penicillinase-producing strains
Streptococcus (Diplococcus) pneumoniae
Escherichia coli
Proteus mirabilis
Klebsiella species

Note—Most strains of *Enterococci* (*Streptococcus faecalis* and *S. faecium*) are resistant to DURICEF. It is not active against most strains of *enterobacter species*, *P. morganii*, and *P. vulgaris*. It has no activity against *Pseudomonas* or *Herella species*.

Disc Susceptibility Tests—Quantitative methods that require measurement of zone diameters give the most precise estimates of antibiotic susceptibility. One recommended procedure (CFR Section 460.1) uses cephalosporin class disc for testing susceptibility; interpretations correlate zone diameters of the disc test with MIC values for DURICEF. With this procedure, a report from the laboratory of "resistant" indicates that the infecting organism is not likely to respond to therapy. A report of "intermediate susceptibility" suggests that the organism would be susceptible if the infection is confined to the urinary tract, as DURICEF produces high antibiotic levels in the urine.

INDICATIONS: DURICEF (cefadroxil monohydrate) is indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Urinary tract infections caused by *E. coli*, *P. mirabilis*, and *Klebsiella* species
 Skin and skin structure infections caused by staphylococci and/or streptococci

Note—Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

CONTRAINDICATION: DURICEF (cefadroxil monohydrate) is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

WARNING: IN PENICILLIN-ALLERGIC PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE USED WITH GREAT CAUTION. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES OF PATIENTS WHO HAVE HAD REACTIONS TO BOTH DRUGS (INCLUDING FATAL ANAPHYLAXIS AFTER PARENTERAL USE.)

Any patient who has demonstrated a history of some form of allergy, particularly to drugs, should receive antibiotics cautiously and then only when absolutely necessary. No exception should be made with regard to DURICEF (cefadroxil monohydrate).

PRECAUTIONS: Patients should be followed carefully so that any side-effects or unusual manifestations of drug idiosyncrasy may be detected. If a hypersensitivity reaction occurs, the drug should be discontinued and the patient treated with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

DURICEF (cefadroxil monohydrate) should be used with caution in the presence of markedly impaired renal function (creatinine clearance rate of less than 50 ml/min/1.73M²). (See Dosage and Administration.) In patients with known or suspected renal impairment, careful clinical observation and appropriate laboratory studies should be made prior to and during therapy.

Prolonged use of DURICEF may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

USAGE IN PREGNANCY: Although no teratogenic or anti-fertility effects were seen in reproductive studies in mice and rats receiving dosages greater than the normal human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

ADVERSE REACTIONS: Gastrointestinal—The most frequent side-effect has been nausea. It was infrequently severe enough to warrant cessation of therapy. Administration with food decreases nausea and does not decrease absorption. Diarrhea and dysuria have also occurred.

Hypersensitivity—Allergies (in the form of rash, urticaria, and angioedema) have been observed. These reactions usually subsided upon discontinuation of the drug. Other reactions have included genital pruritus, genital moniliasis, vaginitis, and moderate transient neutropenia.

DOSAGE AND ADMINISTRATION: DURICEF (cefadroxil monohydrate) is acid stable and may be administered orally without regard to meals. Administration with food may be helpful in diminishing potential gastrointestinal complaints occasionally associated with oral cephalosporin therapy.

Adults—For urinary tract infections the usual adult dosage is one gm. (two 500 mg. capsules) two times per day. For skin and skin structure infections the usual dose is 500 mg. two times per day or 1 gm. once a day.

In patients with renal impairment, the dosage of cefadroxil should be adjusted according to creatinine clearance rates to prevent drug accumulation. The following schedule is suggested. In adults, the initial dose is 1 gm. of DURICEF (cefadroxil monohydrate) and the maintenance dose (based on the creatinine clearance rate (ml/min/1.73M²)) is 500 mg. at the time intervals listed below.

Creatinine Clearances	Dosage Interval
0-10 ml/min	36 hours
10-25 ml/min	24 hours
25-50 ml/min	12 hours

Patients with creatinine clearance rates over 50 ml/min may be treated as if they were patients having normal renal function.

Children—Dosage and safety have not yet been established in children.

HOW SUPPLIED: DURICEF[®] (cefadroxil monohydrate) capsules 500 mg. for oral administration in an opaque maroon cap and opaque white body No. 0 hard gelatin capsule. On each half capsule printed in black is "MJ" and "500." Available in bottles of 24 capsules (NDC 0087-0784-41) and 100 capsules (NDC 0087-0784-42).

U.S. Patent Re. 29,164

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DEATHS

BOONE, HOWARD L., Laurel. Born Goree, TX, June 9, 1909; M.D., Emory University School of Medicine, Atlanta, GA, 1933; interned U.S. Army, Ft. Barraneas, FL, 1933-35; emeritus member of MSMA and AMA; died Oct. 7, 1979, age 70.

JONES, EDLEY H., Vicksburg. Born DeQueen, AR, Dec. 14, 1898; M.D., Tulane University School of Medicine, New Orleans, LA, 1922; Postgraduate training, New York Eye and Ear Infirmary, Temple University and the Chicago Eye and Ear Infirmary; member of Fifty Year Club of MSMA; died Sept. 27, 1979, age 80.

LEHMANN, LOUIS C., Natchez. Born Hermanville, MS, Jan. 4, 1923; M.D., Louisiana State University School of Medicine, New Orleans, 1948; interned Jackson Memorial Hospital, Miami, FL, one year; pediatric residency, Thompson Children's Hospital, Chattanooga, TN, 1952, and 1954-55; pediatric residency, Charity Hospital, New Orleans, LA, 1955-56; died Oct. 20, 1979, age 56.

WOODRUFF, R. E., Aberdeen. Born Gadsden, AL, Oct. 3, 1896; M.D., Meharry Medical College School of Medicine, Nashville, TN, 1927; died Oct. 7, 1979, age 83.

NEW MEMBERS

BATES, G. WILLIAM, Jackson. Born Durham, NC, Feb. 15, 1940; M.D., University of North Carolina School of Medicine, Chapel Hill, 1965; interned University of Alabama, Birmingham, one year; ob-gyn residency, University of North Carolina, Chapel Hill, 1966-70; fellowship, reproductive endocrinology, University of Texas Southwestern Medical Center, Dallas, TX 1976-78; elected by Central Medical Society.

BULLWINKEL, BRUCE ALLAN, New Albany. Born Morristown, NJ, Oct. 14, 1948; M.D., University of Tennessee College of Medicine, Memphis, 1974; interned Methodist Hospital, Memphis, TN, one year; general surgery residency, same, 1975-79; elected by Northeast Medical Society.

BURNS, JANIS EDMONDS, Tupelo. Born Austin, TX, Sept. 5, 1948; M.D., University of Texas Southwestern Medical School, Dallas, 1973; interned University Medical Center, Jackson, MS, one year;

general surgery residency, same, 1974-77; plastic surgery residency, same, 1977-79; elected by Northeast Mississippi Medical Society.

ELLIS, G. H., Tylertown. Born Tuscaloosa, AL, July 3, 1950; M.D., University of Alabama School of Medicine, Birmingham, 1975; interned Naval Regional Medical Center, Philadelphia, PA, 1975-76; elected by South Central Medical Society.

HARDIN, JAMES ROBERT, Greenwood. Born Lima, OH, Sept. 28, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned Baylor University Medical Center, Dallas, TX, one year; surgery residency, same, 1975-76; urology residency, University Medical Center, Jackson, MS, 1976-79; elected by Delta Medical Society.

HEWES, THOMAS F., Gulfport. Born Gulfport, MS, Oct. 16, 1944; M.D., University of Mississippi School of Medicine, Jackson, 1971; interned Tulane University, New Orleans, LA, one year; orthopedic surgery residency, same, 1972-76; elected by Coast Counties Medical Society.

LAMBDIN, SAMUEL H., Greenwood. Born Natchez, MS, Dec. 20, 1949; M.D., Tulane University School of Medicine, New Orleans, LA, 1975; interned Tulane and Charity Hospital, New Orleans, one year; otolaryngology residency, University Medical Center, Jackson, MS, 1976-79; elected by Delta Medical Society.

MEEKS, GEORGE RODNEY, Jackson. Born Tulsa, OK, April 27, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1974; interned University of Rochester, New York, 1974-75; ob-gyn residency, same, 1975-78; elected by Central Medical Society.

MORRISON, J. C., Jackson. Born Mayfield, KY, Sept. 11, 1943; M.D., University of Tennessee College of Medicine, Memphis, 1968; interned City of Memphis Hospitals, Memphis, one year; ob-gyn residency, same, 1969-72; elected by Central Medical Society.

PRATER, W. F., Jackson. Born Woodville, MS, May 12, 1948; M.D., University of Cincinnati College of Medicine, Cincinnati, OH, 1974; interned and ob-gyn residency, Martin Luther King, Jr., Hospital, Los Angeles, CA, 1974-78; elected by Central Medical Society.

RALLING, ANTONY, Pontotoc. Born London, England, March 29, 1926; M.D., McGill University Faculty of Medicine, Montreal, Quebec, Canada, 1948; interned, Montreal General Hospital, one

NEW MEMBERS / Continued

year; surgery residency, same, 1949-50; fellowship in surgery, Mayo Clinic, Rochester, MN, 1950-53; elected by Northeast Mississippi Medical Society.

RHODES, PHILIP GLEN, Jackson. Born Wichita, KS, June 9, 1945; M.D., University of Kansas School of Medicine, Kansas City, 1970; interned and pediatric residency, Children's Mercy Hospital, Kansas City, MO, 1970-72; neonatology fellowship, same 1972-74; elected by Central Medical Society.

SEIDENSTICKER, WILLIAM LEWIS, Gulfport. Born Chillicothe, OH, June 27, 1944; M.D., St. Louis University School of Medicine, St. Louis, MO, 1970; interned St. Joseph Mercy Hospital, Ann Arbor, MI, one year; orthopedic surgery residency, same, 1971-72; orthopedic surgery residency, Tulane University, New Orleans, LA, 1972-76; elected by Coast Counties Medical Society.

ZAMORA, IVAN V., Quitman. Born Nicaragua, April 5, 1945; M.D., Facultad de Medicina y Cirugia de la Universidad Nacional de Nicaragua, Leon, Nicaragua, 1970; interned General Hospital, Nicaragua, one year; general surgery residency, Jewish Hospital, Cincinnati, OH, 1973-74; general surgery residency, Appalachian Hospital, Beckley, WV, 1974-77; vascular surgery residency, UPH Hospital, Newark, NY, 1977-78; elected by South Central Medical Society.

PERSONALS

MAX ALLEN, JR., has associated with VIRGINIA S. TOLBERT of Ruleville for the practice of general surgery and medicine.

LEONARD D. BALL of Gulfport has been appointed medical director for the Gulf Coast Mental Health Center.

A. WALLACE CONERLY of UMC was chest consultant for a recent conference at the Southwest Mississippi Medical Center in McComb.

B. H. COOK of Jackson announces the relocation of his practice of general medicine to 15 North Towne Drive.

DONALD ELLIS of Clarksdale recently appeared on a Memphis television show, discussing the Improved Child Health Project operating in eight Mississippi counties.

ARMIN HAERER of Jackson and UMC presented a

paper at the Central Society for Neurologic Research in Cable, WI, in October.

DONALD S. HALL, JR. of Vicksburg recently spoke at a meeting of the Vicksburg Rotary Club on the subject of glaucoma and cataracts.

FREDERICK HECKLER of UMC recently presented a paper at the annual meeting of the American Society of Plastic and Reconstructive Surgeons in Toronto, Canada.

HARPER K. HELLEMS of UMC made three presentations at a recent cardiology symposium in San Juan, Puerto Rico.

The Laird Clinic of Family Medicine (KERMIT LAIRD, J. F. ECKFORD, STENNIS WAX, BINFORD T. NASH, JR.) recently opened in Starkville.

HERBERT LANGFORD of UMC chaired the American Heart Association's program committee during a meeting of the Council for High Blood Pressure Research in Cleveland, OH.

ERNEST H. MITCHELL, JR. has joined the staff of the Coast Obstetrical and Gynecological Clinic, P.A. (M. E. COCKRELL, A. L. DIAZ, and W. B. PROFILET), in Ocean Springs.

JOHN P. MLADINEO of Jackson announces the relocation of his practice of gynecologic oncology to 935 North State St.

T. L. MOORE of McComb recently was presented with the "Alumnus of the Year" award from Southwest Mississippi Junior College.

WILLIAM C. NICHOLAS of UMC presented a paper at a meeting of the College of Family Physicians of Ontario in Toronto, Canada, in October.

E. FRANKLIN RAWLINGS has associated with the Gulf Coast Surgical and Diagnostic Center, P.A., for the practice of ophthalmology.

ROBERT A. SANFORD of UMC recently lectured on aspects of head injury at the Singing River Hospital in Pascagoula.

TOM SCANTLEBURY of Prince Edward Island, Nova Scotia, Canada, has established his medical practice in Aberdeen.

EDSEL STEWART of McComb was recently honored by the Gillsburg community with a reception and public showing of his paintings.

W. W. WALLEY of Waynesboro and staff members of the Wayne General Hospital recently celebrated the delivery of his 5,000th baby in 28 years of obstetrics.

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PLACEMENT SERVICE

The Mississippi State Medical Association offers this placement service free of charge to Mississippi hospitals or clinics seeking physicians, and to physicians seeking to relocate in the state. Display advertisements will be charged at regular rates. Out-of-state clinics advertising for physicians will be listed in the classified department at regular classified rates.

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IN CONCLUSION

Data collected on surgical implantation of 177,503 intraocular lenses into the eyes of cataract patients have given an FDA advisory committee no reason to recommend that implantation of these lenses be stopped, according to a report delivered at the annual meeting of the American Academy of Ophthalmology. The FDA report did show that one type of intraocular lens - the anterior chamber lens - showed a higher incidence of certain postoperative complications and less improvements than did others.

There are some 30,000 new cases and needless deaths each year from tuberculosis, and TB patients who should be back in the mainstream of society are still facing a stigma associated with their disease, said a speaker at the scientific assembly of the American Academy of Family Physicians. The director of the Pulmonary Disease Division of the New Jersey Medical School said patient noncompliance in taking medication and inappropriately prescribed chemotherapy are two causes of treatment failure in the U.S.

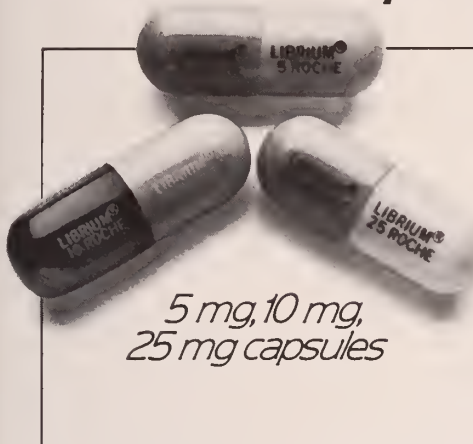
American Medical Association membership reached 190,184 during October, an increase of 12,043 over the previous year. This gain doubles the 1978 increase. The continuing growth in student and resident memberships was cited as a factor, since the current total for these categories - 39,980 - is nearly 9,000 above the 1978 figures. Student membership, which began in 1973, permits representation to the House of Delegates, voice in 6 AMA councils, and activity in the Student Business Section.

Physicians are urged to stress moderation and common sense in advising their patients about diet and nutrition. The report of the AMA Council on Scientific Affairs, published in the Nov. 23 JAMA, has been adopted by the House of Delegates as official policy. The report acknowledges that the effort by physicians, nutritionists and other health professionals to educate the public about food and nutrition is often difficult, but stresses the urgent need to provide accurate information.

The state's 154 ambulance services transported 95,290 patients between July 1, 1978 and June 30, 1979, an increase of 8,331 over the previous year...College Board is taking legal action against students who received medical degrees and fled the state to avoid repaying loans which had stipulations requiring that they remain in the state to practice family medicine...Mississippi has been awarded Energy Department funds to make schools, hospitals and other institutions more energy efficient.

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chlordiazepoxide HCl/Roche



5 mg, 10 mg,
25 mg capsules

- ☐ Proven antianxiety performance
- ☐ An unsurpassed safety record
- ☐ Predictable patient response
- ☐ Minimal effect on mental acuity at recommended doses
- ☐ Minimal interference with many primary medications, such as antacids, anticholinergics, diuretics, cardiac glycosides and antihypertensive agents

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and

acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. Oral—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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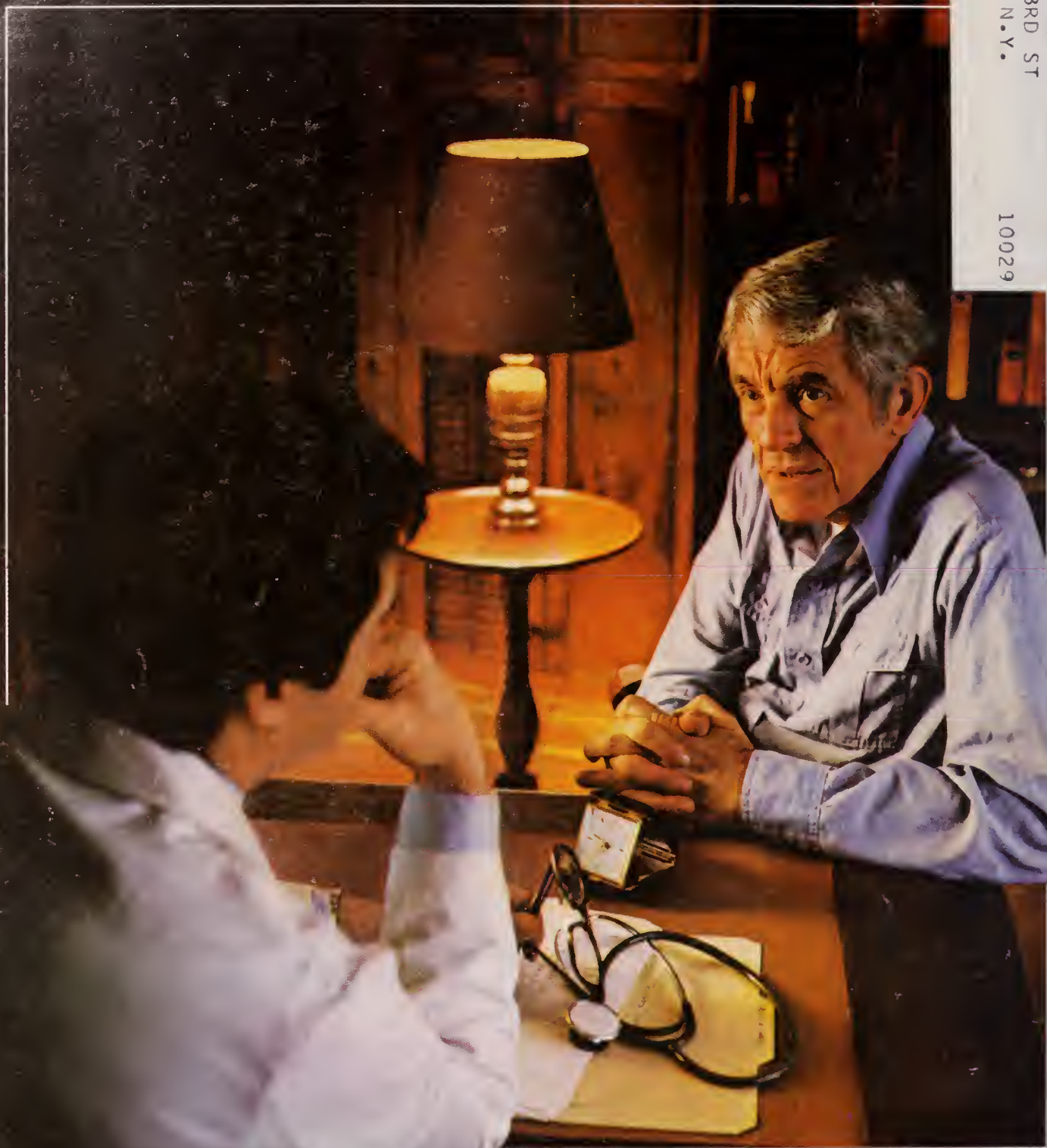
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Please see preceding page for a summary of product information.

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